Occidental Medical Times

VOL. VI. JUNE, 1892. No. 6.

ON HYPODERMOKLYSIS.

By MAX HILDEBRAND, M. D., San Francisco, Cal.

Read before the California Academy of Medicine.

Hypodermoklysis consists, as the term implies, in the introduction of fluid under the skin, in order to wash out the system through the natural channels of circulation. In the experiments that were made by Dastre and Loye, about three years ago, on dogs and rabbits, a 0.7 per cent. solution of chloride of sodium was employed and injected directly into the veins of the animals. Four times the amount of the normal quantity of the blood may be infused in this manner without any danger to the life of the animal on which the operation is performed.

In the first place, the most remarkable fact may be mentioned that the blood pressure which could reasonably be expected to increase, after the infusion, from general plethora, is by no means higher than before. The diuretic effect of the infusion becomes apparent about two or three hours afterward. The infusion of this so-called physiological solution may be regulated in such a manner that within 15 minutes for every pound weight of the animal's body one drachm of the solution is passed into the blood current. Thus for an ordinary dog weighing about twenty pounds the maximal harmless quantity of salt water infused into his system would be about two drachms per minute, and if this ratio is kept up the infusion may last for hours, with the result that the same quantity of urine is discharged as salt water is passed into the system. If, however, the pressure of the salt water injection, that is the rate of the current, is increased above these figures, the accumulation of water in the system proves fatal to the animal, because the kidneys cannot evacuate it as speedily as it is injected. The infusion takes place in such manner that, if a certain quantity of the solution has been deposited within the walls of the blood vessels and within the tissues of the body, diuresis sets in and the quantities of the injected and discharged fluids are perfectly balanced. If at this moment any more solution was injected, it would be exactly as if fluid was passed into a cask already full, that of necessity, must run over. I would not feel justified, however, in comparing this to the condition of the cask of the Danaides, as Sahli has done.

While infusion is going on, the urine of the animal becomes gradually paler and diminishes both in specific gravity and in its mineral constituents until it is almost similar to the fluid injected. In this way the tissues of the body are, as it were, washed out, and more urine is carried off than would have been possible without the infusion. It may be stated here that albumin does not appear in the urine during the process. It must, however, be remembered that the infusion of the physiological solution into the veins of animals is only a harmless operation, provided the heart is perfectly healthy, otherwise the increased tension of the right ventricle may prove a source of serious danger to the animal. Even if we leave this circumstance out of account for a moment, it is proved by the experiments of Roux and Yersin (*Annales de l' Institut Pasteur*, 1889: "Contributions à l'étude de la Diphthérie,") that the treatment by means of salt water infusion of animals that were poisoned with different bacterial products, have given very bad results. Under these circumstances it would have been out of the question to use the direct infusion of salt water into the veins in the treatment of diseases in man. It was necessary to find a method that could produce the beneficial effects of the infusion and at the same time avoid its dangers.

The merit of the discovery of this new method is due to Cantani who, first, conceived the brilliant idea of injecting the physiological solution hypodermically and named it "hypodermoklysis." It was employed by him in two different conditions: exhaustion after severe losses of blood and in cholera. His purpose was to replace the loss of water and in this way to overcome the drying up of the tissues. But this is not all. We know that a great many diseases, the nature and the origin of which were recently a sealed book, are produced either by the excretions of microbes living in our bodies or by the physiological excretions of the body itself. The investigations of Brieger leave no doubt, that both yield a variety of highly poisonous substances, which are either alkaloid, produced by decomposition and called ptomaïnes or toxines, or are derivatives of pathogenic bacteria and called toxalbumines. Toxines and toxalbumines, when brought into the circulation, give rise to extremely dangerous intoxications. It has been proved by the investigations of Bouchard, Roux and Yersin,[1] that in many diseases, especially those combined with fever, the poisonous substances, which circulate in the blood, leave the body by way of the kidneys, and it is a well known fact that in different morbid conditions; for instance in uremia, typhoid fever, cholera, tetanus, etc., the reappearance of a copious discharge of urine, is considered a sign of favorable prognosis.

---

[1] Eliminations de certains poisons morbides, Arch. de Physiol. 1890.

The introduction of saline infusions in the regular treatment of diseases has opened a new and extensive field for medical action. The results that have been published by careful observers of different nations have contributed to establishing this method as a most powerful remedy in cases where formerly the physician was compelled to retreat with resignation from the field of action. The method of performing the infusion is very simple. A glass vessel, containing about 30 to 40 ounces, is filled with a sterilized solution of 7 parts chloride of sodium and 1,000 parts of water (about 3½ grains to the ounce). The temperature should be about 110° F. A glass siphon leads through a tight stopper from the vessel to an india rubber tube, ending in a large-sized trocar. A glass pipe, filled at the upper end with sterilized cotton, leads to the bottom of the vessel for the purpose of admitting the necessary air. It is unnecessary to add that the utmost care should be taken that all parts of the apparatus be sterilized. The best place for the injection is the abdomen. As soon as the trocar is pushed through the skin into the cellular tissue, the saline solution is injected by holding the glass vessel about four or five feet above the abdomen of the patient. The time required for infusing 30 ounces is about five minutes. While the infusion is going on, a tumor is gradually formed, the contents of which are absorbed by the cellular tissue in about three hours. While it is true that the formation of this tumor is rather painful on account of the tension of the skin, it must be remembered that in the majority of cases in which the operation is performed the patient is in a semi-conscious condition, and in the remainder it disappears in two or three hours.

The effect of the operation in some cases is simply surprising. Where, only a few minutes before, pulse and respiration had ceased and all hope was abandoned, a perfect change may take place, and a rather abrupt inspiration indicates the return of the patient to life. In other cases the good result is apparent more slowly, and is often denoted by increased diuresis and lower temperature. As the indications for saline infusions are so manifold, that their enumeration would far exceed the limits of this paper, I will only mention the most important.

In the first place saline infusions have proved successful in cases where severe loss of blood had occurred, and, as has already been mentioned, in cholera. It has been employed by Sahli, of Berne, in cases of uremia and of typhoid fever, with excellent results. He says that, apart from the diuretic effect of the infusions and the washing out of the system, he is of opinion that great stress should be laid upon the fact that the specific poisons in the tissues and in the blood are *diluted* by the infusion. He also points out the importance of the possibility, in typhoid fever, of introducing sufficient quantities of water into the body, notwithstanding the presence of diarrhea and prostration of the digestive organs, and thus counteracting the drying up of the tissues. Besides these cases hypodermoklysis has been successfully employed in the following conditions: septic blood poisoning, diabetic coma, gastric or intestinal ulcers, and anemia, and Sahli recommends it very strongly in cholera infantum, although he has not tried it himself in this disease.

From my own experience I can very strongly recommend it in asphyxia from chloroform. In two cases under my observation it acted promptly, after electricity and artificial respiration had failed. I would, however, unhesitatingly employ it, as the only means of saving life in intoxication from alcohol, morphine, carbonic oxide, and in all apparently hopeless cases of snake-bite. I am perfectly certain that many lives would be saved in this way. Of course, time and careful observation alone will show whether hypodermoklysis is as powerful and expedient a remedy as, judging from present standpoints, could reasonably be expected.

219 Geary st.

THE ELECTROLYTIC TREATMENT OF HIRSUTIES.

By **Alfred E. Regensburger, M. D.**, San Francisco, Cal.

Read Before the California Academy of Medicine.

The century towards whose end we are nearing with giant strides, is, indubitably, the century of electricity. During the nineteenth century, man has begun to subordinate to his power the tremendous forces of this agent. In the arts, in manufactures, and in science, victory upon victory has been gained. This is recognized; no illustrations are required. Medicine may have been slow to lay electricity under contribution, but to-day it forms an indispensable part of the armamentarium of every scientific and progressive medical practitioner. While its achievements in the domain of medicine have been many and important, it is with especial pride that the dermatologist can point to its gratifying results in the electrolytic treatment of hirsuties—to which theme I shall, with your kind and considerate indulgence, direct your attention this evening.

Electrolysis may be defined as the decomposition of a subsance by means of an electric current. If two metallic points are introduced into a susceptible organic tissue, but not allowed to touch each other, electrolytic action may be induced—hydrogen gas, caustic soda, and potassa are generated at the negative pole, that coming from the zinc-plate of the battery; while oxygen and acids appear at the positive pole, the one leading from the carbon or copper element of the battery. It will be readily understood that if the current be of sufficient strength in quantity and intensity, and be introduced into the skin by two needles not allowed to touch each other, the salts which are held in watery solution in the tissues, will be decomposed, the acids going to the positive and the alkalies to the negative pole, where they will exert a caustic effect. The electrolytic effect of the current may be limited to any point and to any depth beneath the surface of the skin. We can thus use an alkaline or an acid caustic, and limit its action by the length of time the current is allowed to pass, and by the ampereage (strength of the current). We know, by experience, that a steel needle connected with the positive pole, and inserted into the skin, will be oxidized, and upon its withdrawal a black discoloration will remain at the site of its insertion. We must, therefore, be careful in all cosmetic operations to introduce only the needle connected with the *negative pole*, which does not possess the property of staining the tissues.

A few words here as to the importance of this operation may not be amiss. At first sight it may seem to be a matter of little or no consequence whether or not we are able to remove superfluous hair permanently, particularly from the face, but everyone, who has given the subject any study, will cheerfully admit that the possibility of accomplishing this object is a great advance in dermatology and a veritable boon to humanity. That it is of frequent occurrence needs no proof. Everyone can recollect having seen bearded women in museums and shows, so often, if he has visited these exhibitions frequently, that he would consider one without a bearded woman or a child or hairy man as worthy of being seen as the show itself. We need not go to the museum for cases of hirsuties. One's acquaintance must not be so very numerous, either, for him to recall a number of these cases among his own circle of friends, whose number, when he has counted them, will astonish him. While we hear of it most among women, men's faces are also now and then covered with an abnormal growth of hair. In illustration of that fact, let me remind you of the case of the Russian dog-faced boy, "Jo-Jo," who was exhibited at the Orpheum Opera House, in this city, some months ago. I venture to say that he could be made to look like any other man by submitting himself to electrolytic treatment.

Being convinced of its frequency, many will still be disposed to belittle its importance. This disfigurement occurring in an unmarried female is apt to blight her hopes and make life not worth living. It often causes mental depression amounting to melancholia and insanity. I have time and time again met women whose only thought was the hair on their faces. The thought went to bed with them, got up with them and even haunted them, like Banquo's ghost, in their dreams. It was the thought uppermost and ever present in their minds, unfitting them for everything. It was a mania with them, and the bane of their existence. They were willing to undergo any operation or submit to anything to get rid of it. Dr. J. C. White relates the case of a woman who looked for a surgeon who would flay the affected parts of her face and free her of the undesirable growth. In this connection it may be worth mentioning that insane women are often afflicted with an abnormal growth of hair on their faces. Whether there is any relation between cause and effect, I am unable to say, but as an exciting factor in one who has any disposition to insanity, it is well worthy of investigation and study.

It will thus be seen that it is not a matter to be lightly thought of, and we may congratulate ourselves that we possess the means of curing this until lately, irremediable affection. It is to two American physicians that the credit of suggesting and carrying out an operation which makes this possible is due. Dr. Michel was the first to propose the operation and Dr. Hardaway the first to successfully perform it upon a living woman, about a decade ago. Since that time it has become an accepted and successful operative procedure all over the civilized world.

The operation is simple enough, but not so simple that every one can do it. Liebig and Rohé, in their "Practical Application of Electricity in Medicine and Surgery," give, as some of the requisites for the successful performance of the operation, besides what is usually stated under this head in works treating upon this topic, the following: (1) A plentiful stock of patience. (2) A steady hand. (3) Good eyesight. Further emphasizing this by the additional statement that, "without the first three natural qualifications mentioned (quoted above), no one should undertake the treatment of a case of hypertrichosis by electrolysis." I believe that the non-possession of these essentials on the part of the operator is one of the truest reasons for the lack of success.

Most authors on this subject ignore entirely the individual adaptability of the operator. It requires good eyesight. Many mechanical and optical devices have been proposed and invented to make the work possible and easier for those suffering from various abnormalities of vision. Some use magnifying glasses alone. Others, including Piffard, have had cumbersome, unwieldy apparatus, for holding magnifying glasses constructed, which are perfectly impracticable and useless. Appropriate glasses to correct any disqualifying errors of refraction or accommodation of the operator appear to me the only rational aid which can be given. If these cannot sufficiently assist him, he had better not attempt the operation. An unsteady hand, especially in a person addicted to the excessive use of tobacco and stimulants, would be a sufficient disqualification.

Having good eysight, a steady hand and a large stock of patience, the first thing to be considered is the battery. It would seem superfluous to say a galvanic battery is required, and to add some things which here follow, were it not that one hears, now and then, of the feat of removing superfluous hair having been unsuccessfully attempted by some other form of electricity—at times betraying an ignorance of the whole matter that is really lamentable.

As is well known, three forms of electricity are employed in medicine:

(1) *Friction or static electricity*, franklinism or franklinization, the oldest known variety, the electricity of glass and amber.

(2) *Constant current*, voltaic, galvanic, galvanism, galvanization, voltaism or voltaization—the electricity of chemical action, that of Volta and Galvani.

(3) *Induced current*, electro-magnetism, interrupted current, faradism or faradization—currents of momentary duration induced in a current of copper wire by the action of a voltaic current or permanent magnet, originally described by Faraday.

Of these three, only the *galvanic* form is to be used. Any galvanic battery of 10 to 20 cells, preferably the one having the latter number, or, according to the more modern way of designation, ½ to 3 milliamperes will answer. A dry battery is superior to a wet one, as it is less troublesome to handle and is always ready for use. The battery that I have been in the habit of using has been the 24-cell Barrett dry chloride of silver galvanic battery. Its disadvantages are that it is not constant enough, and that only the manufacturer or his agents can renew the cells when used out, other electricians being unable to do so, or to repair it. Lately the Vetter battery has been put on the market. I would feel inclined to give that instrument the preference, for the reason that many claims for superiority have been put forward for it, which seem to be well founded, among which the constancy and long life of the Leclanché cell which is used in it deserve mention. Dr. Kalloch, formerly stationed at the United States Marine Hospital in this city, informed me that one of these instruments, which was bought upon my recommendation, gave full satisfaction. One drawback to the battery is its cost; a 24-cell battery with rheostat being sold for $50, and if it have a milliampere meter $35 more is charged, bringing the price up to $85.[1]

The next important, indeed, in my estimation, the most important, instrument is the needle, for with a poor, unsuited needle success is out of question. At first ordinary fine cambric needles were employed. More extended experience has demonstrated that the best results are obtained by using the finest jeweler's broach, an instrument used by every watchmaker. It is so ground and shaped on a fine emery wheel that it is bulb-pointed, the neck being narrower than the point or end. Its advantages over the cambric needle are that it can be better guided and more easily and surely carried to the bottom of the follicle near the papilla without penetrating the follicle, as the sharp-pointed unyielding steel needle would be apt to do. It has been suggested to temper these broaches by drawing them through the flame of an alcohol lamp, and then letting them cool. This, if done before operating, will also render them aseptic and bacteriologically sterilize them.

---

[1] **Wakelee & Co., corner Montgomery and Bush streets, are the agents in this city for the manufacturer.**

There are two kinds of broaches in the market, one of Swiss manufacture and the other made of stubbs metal—the latter being the preferable ones. Various other metals have been used in the manufacture of these needles—silver, platinum, and irido-platinum—but none have answered so well as those made of stubbs metal. It is always advisable to have several of these broaches on hand, as they are likely to break and to become injured during the operation. It is also desirable to have a smaller and a larger size.

Besides the needle, a needle-holder is necessary. It is usually made of hard rubber, a little thicker than an ordinary lead pencil, and four or five inches long, one end being so constructed as to hold the needle at various angles, and the other end having a slot or aperture for the fitting in and holding the cord connecting it with the battery. Some have an extra appliance added, by which the current is made or broken by pressing a spring. I cannot say that this is of any benefit.

The connecting cords to the battery need no special mention, except that they must be long enough not to hamper the operator. The electrode to close the circuit is the ordinary one coming with the battery. A good epilating forceps completes the outfit. However, I have found a rubber stall for the index or middle finger of the left hand a valuable addition, as it makes it possible to put the skin on the stretch and thereby to better reach the hairs without interfering with the electric current.

Having placed the needle in the needle-holder, connected it with the cord going to the negative pole of a good working galvanic battery, and the ordinary moistened electrode connected with the positive pole having been given to the patient, who has previously taken her place on a lounge or operating table facing a good light, the operator is ready to begin the operation. This he does by taking the needle-holder in his right hand, if necessary putting the skin on the stretch with the rubber-stalled finger of the left hand, and making it follow a hair until it is arrested by the follicle. He then asks the patient to complete the circuit by pressing the moistened positive electrode, which she has been holding by the handle, into the palm of her disengaged hand. The needle is kept *in situ* until a few frothy bubbles are seen arising by its side, which occurs in five or ten seconds. Should this froth not appear in ten or twenty seconds, the current is too weak and the strength should be increased. After the frothy bubbles appear, the patient is directed to remove the electrode, and the needle is withdrawn. Upon gentle traction with the epilating forceps, the hair will be found to have become loosened, and will come away with very little force.

Should it not come away easily, the needle may be re-introduced.

Should this fail, the hair had better be extracted and another one tried, as, if left, it often acts as an irritant, and adds to the subsequent discomfort of the patient. In choosing succeeding hairs, it is desirable to leave some space between them, as by so doing there is less likelihood of scars remaining. Acne spots had also better be avoided. After the operation the face becomes very erythematous; wheals are present, and the skin is more or less irritated. This condition may be mitigated by the application of a zinc salve, the following being suitable:

℞—Zinci oxidi .... gm. 4.0
Ung. benzoini .... 30.0.—M.

After these primary results have passed away, the skin looks, sometimes, almost normal. Indeed, it is frequently necessary to put the skin on the stretch; irritate it by stroking with the fingers, and let a strong light fall on it to see the minute whitish specks or apertures of the needle punctures. In other instances, where the results of the operation are not so good, the slight scarring is plainly visible. More or less scarring remains permanently after every operation.

A great deal has been said about the pain of the operation, but my patients, as a rule, have not complained much about it. The most sensitive spots are the upper lip, near the nose, next the neck region of the larynx, then the cheeks, near the temple, and last of all the chin. Some operators have recommended that a 10 per cent. cocaine ointment be rubbed in immediately before the operation, to deaden the pain. This I have found of little or no use; most patients objected to it the second time, if they did not at first.

The question of electrical dosage, as well as the ameter, may be here considered. Is an ameter necessary to estimate the dosage in this operative procedure? Most emphatically, no. In fact, it seems undesirable to use this instrument here for the following reasons:

(1) It adds an extra expense to an already too expensive electrical outfit without any counterbalancing advantage.

(2) It is rather, comparatively speaking, a new instrument with which the majority of the profession are unfamiliar.

(3) It is not the number of milliamperes which indicate the dosage required, but the changes at the needle at its emergence from the skin, which are the criterion.

(4) Instead of being an advantage it is a decided disadvantage, as it distracts the attention of the operator from the needle, which he should watch, and which denotes the dosage, to the ameter, which represents nothing.

(5) The difficulty of reading the small ampereage needed. In one word, the dosage required may be obtained from 10 to 20 cells, and is shown by the changes at the point of the needle.

Before dismissing this part of the subject, it is worth mentioning that if at any time the patient begins to feel dizzy, faint or nauseated, the strength of the current should be at once decreased, and if these sensations persist the operation should be postponed to a future date.

It is difficult to state in advance, with anything like precision, the time required to cure a given case. This depends upon the length and number of sittings, the expertness of the operator, and also upon the tendency of the hairs removed to return. The majority of operators can do from 40 to 60 hairs an hour, and this number should not, as a rule, be exceeded at one time. I have removed at one sitting, lasting an hour and a half, 300 hairs, and several times 200 to 250 in an hour, when greatly pressed by the patient. I would not advise any one to do that number at one sitting, as it is too hard on the physical endurance of both physician and patient, and the work is not likely to be done so well.

As regards the number of hairs that will return, it may be placed at from 10 to 50 per cent. In one case, where I removed over 6,000 hairs in 50 sittings, only about 10 per cent. returned, while in another case of 100 removed, at least 50 returned, and that in one of my later cases, when I had attained a good deal of expertness and practice. In the last case the operation was done thoroughly and slowly, never more than 50 hairs being removed at a sitting of an hour's duration.

Sometimes more hairs seem to return than really do. This may be explained upon the ground that many of the adjacent thin lanugo hairs obtain an additional stimulus from the electrical current, take on extra growth and become apparent where they before escaped notice. Besides these real discouragements, you have the unreasonableness of the patient to contend with. In 9 cases out of 10, when you have removed permanently 75 to 80 per cent. of hairs, or even every one of them, they will assert that you have done absolutely nothing for them.

The way to convince them would be to have a photograph taken as they appeared before the operation, and in that way show what had been accomplished. Even if you did that, and had been successful in removing every hair, they would very likely tell you, "Oh, you have not done such a big thing, after all." You will have to let the work speak for itself and look for a blessing from on high. In the words of the immortal Schiller:

> "Soll das Werk den Meister loben;
> Doch der Segen kommt von Oben."

116 Grant avenue.

A CASE OF SIGMOID COLOTOMY.

By George Goodfellow, M. D., Tombstone, A. T.

A. H. S.——, American, æt. 50, consulted me for a severe dysenteric attack May 16, 1889. He was treated, and improved rapidly, to all appearance regaining his normal health. On June 8, 1889, he again consulted me, the dysenteric symptoms having returned. For two or three days preceding, he had had copious hemorrhages *per anum*, the total amount, so he said, having been not less than a gallon. An examination was made, and the rectum, from about two inches above the anus to as far as could be felt, was found to be filled with some neoplasm. His principal symptoms were constant and intense pain about the rectum; tenesmus, with continual discharge of an offensive fecal muco-purulent fluid. He informed me that for the previous ten days he had been unable to walk or ride, owing to the pain. He had been for ten years, during which time I had known him, an excessive drinker of alcoholic liquors. There was no history of specific infection, and the diagnosis of cancer was made.

The necessity of operation, curative or palliative, was explained, but as his mental powers were failing rapidly, operation was delayed, as the opinion prevailed that there was little need for prolonging, or for attempting to prolong, a life so utterly useless. The symptoms finally becoming so tormenting, not only to him but also to all about him, it was decided to perform sigmoid colotomy. This was done after the method of Allingham, on July 8th, with the assistance of Drs. Francis and Will Haynes, of Los Angeles. The relief experienced, and the complete disappearance of all painful symptoms was so marked, that I regretted the operation had not been performed before. Death was not materially hastened, and comfort was absolute until the end. The patient lived over 80 hours. After the operation the symptom mentioned by Bryant, ballooning of the rectum, was noticeable, but prior to the total occlusion of the gut it had not been present.

The autopsy disclosed a cancer of the rectum, extending to and above the brim of the pelvis. Of the operation *per se*, which was done in the usual way, a few words must be said. It is easily and rapidly performed, but a few minutes being required, the gut rolling into view the instant the abdomen is opened. The incision is small, and the work almost extraperitoneal. The spur is made at once, thus causing complete cessation of the tenesmus, without which the operation should be considered a failure, for if the object be to relieve the obstruction, it ought to do so by completely diverting the passage of feces. Whether the plan proposed of cutting off the distal end of the gut, and, after suturing it, dropping it into the abdominal cavity, will be applicable to all cases, is doubtful. It certainly would seem to have a limited range of applicability.

Sigmoid colotomy is not a modern operation. It was proposed first in 1710 by Littre, but seems to have fallen into disrepute until recently, when a new impetus has been given to the procedure by discussion and successful operation, the principal advocate of the measure being Allingham. The conditions indicating colotomy in any form are well known, and may be summed up under the following statements: "Such circumstances as necessitate putting the colon at rest, or relieving stricture or obstruction, particularly in carcinoma of the rectum." In all malignant affections of the bowels, the ultimate result of the disease is beyond dispute, without some operative procedure. The question, therefore, arises in this—as in all similar operations—"When is the proper time for interference?" If we intend to operate, what valid objection can there be to early operation in admitted cancerous affections of the intestines where this can do temporary good? Death is inevitable, and speedy death, if the diagnosis be exact. All, then, to be gained by any method of treatment, is euthanasia. Ethical principles, with which I am not to be considered as agreeing, have decreed that it is the duty of the profession to prolong life to the extreme limit, no matter how repulsive to the invalid and to his surroundings. Such being the admitted practice, do we best accomplish this by delaying an operation until the patient is moribund, or by performing it while he is in good condition and can be decidedly relieved of the most harrassing symptoms connected with the terrible malady? It seems to me that there can be but one answer to this—early operation. In thus acting, our full duty is done. The patient is rendered comfortable during the progressive period of the affliction, and the excessive development of the most grievous symptoms is almost entirely prevented. On the other hand, if the determination is to be tentative, to await the onset of all the disgusting and frightful array of disturbances that are unavoidable, should an operation be performed? Again ethics say, "Yes." We operate, but the patient rarely is benefitted commensurately with the trouble and risk of the operation. From the foregoing considerations, it seems to me that if intestinal cancer be diagnosticated, and that diagnosis be certain, or even moderately so, and the location of the disease be such that the rigors of the malady are susceptible of amelioration by operation, particularly one so facile as that of sigmoid colotomy, it should be performed. There can be no good argument for delay.

PUERPERAL FEVER FROM SELF-INFECTION.

By H. KREUTZMANN, M. D., San Francisco, Cal.

Read before the San Francisco County Medical Society.

Cases of "fever in child-bed," from affections of the genital organs, "puerperal fever," in a strict sense, have been observed and described ever since medical science and literature has existed, but at no time was there such a fearfully high morbidity and mortality among puerperæ as in the second, third and fourth decade of the present century. During this period a mortality of 10 and 15 per cent. in lying-in hospitals was not the exception, but almost the rule. It is horrible to think that thousands and thousands of women perished in the prime of life, in the performance of a physiological act, from a disease, which can be avoided.

A large number of theories upon the cause and origin of puerperal fever have been advanced, but none of them stood the practical test. It was in 1847 that Ignaz Philipp Semmelweis, at that time assistant physician to the obstetrical department of the Wiener Allgemeine Krankenhaus, made the great discovery that puerperal fever is caused by decomposed animal organic matter carried to and into the genitals of parturient or recently delivered women. This may take place by means of the hands and instruments of physicians and midwives, by sponges and cloths, bedclothes and bedpans; in fact, by anything that comes in contact with the genitals of a parturient woman. The decomposed animal organic matter, Semmelweis found, is derived from cadavers, the lochia of women suffering from puerperal fever, from infected wounds and from ulcerations.

Besides this class of cases Semmelweis observed that fever occurred occasionally where no decomposed organic matter had been carried into the genitals from outside. His opinion was, that this puerperal fever, while identical with the ordinary one, was caused by decomposed animal matter generated within the organism of the puerpera, independent of the access of anything from outside. He termed these cases "self-infection" (*selbstinfection*), and estimated their occurrence as about one in every one hundred cases of puerperal fever.

Semmelweis' definition of childbed fever, therefore, is that it is not an epidemic, nor a contagious disease in the ordinary sense, nor subject to telluric influences; but that it is simply an infection of the wounds, always present in child-bearing women, with decomposed organic matter. It is not a specific disease; its peculiarities are caused by the locality and by the character of the affected parts. Semmelweis remarks that a man does not get child-bed fever because he has no uterus; but he is subject to the same infection of wounds as a woman. He had, in fact, been led to his great discovery through an autopsy on Kolletzka, professor of anatomy, who had been infected when dissecting the cadaver of a woman who had died from puerperal fever. Kolletzka's body showed all the anatomical lesions so familiar to Semmelweis from many dissections of women who had succumbed to puerperal fever.

Very little has been added to these views, and they stand to-day as they did almost fifty years ago. Through Koch's researches we have learned to recognize those microörganisms, streptococcus (pyogenes aureus) and staphylococcus, that are always present in infected wounds, and to the presence of which, in all probability, is due the infection. These were also found in cases of puerperal fever, and we know, positively, that there is no specific bacillus or coccus of this disease, and that any germ which produces infection of wounds, such as phlegmon, erysipelas or gangrene, can produce puerperal fever, if inocculated in the lying-in woman. This must be considered an established fact, and we must concede to Semmelweis the priority of his discovery in midwifery, long before Lister's in surgery.

Semmelweis' theory of "self-infection" has of late been the subject of clinical investigations and bacteriological researches, and the topic of many discussions, especially among German authors. It has been questioned whether any such thing as self-infection really exists, and what is meant by this expression. Semmelweis' term, "self-infection," was a good one, entirely logical and correct, because he believed that a woman could infect herself with material derived entirely from and generated within herself. The supporters of "self-infection" now say that in the vagina and cervix of every pregnant woman are numbers of microörganisms, and that when these germs become active during or after delivery, invade the system or produce ptomainres, which are absorbed, this constitutes "self-infection" in opposition to infection from without or by contact, where the active germs are carried to the genitals during labor. These germs in the vagina need not be specific or pathogenic; their virulence depends entirely on circumstances; on the mediums, from whence they were derived; on the nutritive soil which they meet. Certain conditions favor the development of "self-infection," as premature rupture of the membranes, protracted labor, maceration of the fetus, contusions and lacerations of the soft parts. Against this modern theory of self-infection much has been and can be said with good reason.

Semmelweis' doctrine of self-infection cannot be maintained to-day; no decomposition or putrefaction of animal organic matter inside or outside the human body occurs without the action of germs, the saprophytes. This we know through Pasteur's fundamental experiments upon urine. Furthermore, we often see pieces of the placenta, of the membranes, and even the dead fetus remain *in utero* for any length of time without putrefaction, in fact as long as no germs of decomposition have gained entrance. Instead of abandoning this theory, other names have been suggested by the self-infectionists, as autoinfection, spontaneous infection; but they are altogether incorrect, and the expression "self-infection," or its substitutes, should be dropped from our nomenclature. Undoubtedly the process of infection and intoxication in every case of puerperal fever is a most complicated one, and we know but little about it. Still, clinical facts and bacteriological observations enable us to form some opinion regarding the etiology.

We distinguish two large groups of fever in child-bed. The first group, comprising septic cases in a wide sense, is caused by some virulent infectious material, the bearers of which are certain microörganisms, as staphylococcus and streptococcus. These invade the system through wounds of the external genitals, or of the vagina, cervix, or endometrium. According to the place of entrance, the virulence of the germs, the vitality of the invaded tissue and a great many other factors of which we are at present ignorant, we observe different forms of puerperal fever, either localized or general. In every single instance, without exception, these microörganisms are brought to the wounds from outside; there is no self-infection in the sense that they are generated inside the female organism from the organism itself. In almost every instance the infectious germs are introduced by the attendants at the time of delivery. In rare cases they are deposited in the genitals before delivery; directly by manipulations on the part of the patient, indirectly through the air, or by specific secretions, as gonorrheal pus. But this is not "self-infection," as the infection comes from without. In every case this affection is a most serious one, and the prognosis doubtful; even if death does not occur, the health of the patient is often permanently impaired.

The second group we may call the putrid form. Decomposition and stagnation of the secretions of vulva, vagina, or endometrium may set in; a retained piece of the secundines may become putrid; the products of this decomposition are absorbed into the system, and fever ensues. This resorbtion may take place from any part of the genital tract. This decomposition is started by germs that are ubiquitous, but which are without any specific infectious action; if inocculated they do not produce disease, though many are identical, morphologically, with the much dreaded streptococcus and staphylococcus.

Resorbtion occurs only from places where the epithelial layer, the natural protector, has been destroyed; why decomposition and resorbtion does not take place in every case where favorable conditions exist, we simply do not know, but, as a rule, the superficial wounds are sealed up, and the lymphatics and blood-vessels are closed, when the secretions become dangerous. In every case these ubiquitous germs are carried to the genitals from outside; they are always present in and around the genitals, but not as a rule in the uterine cavity; no vagina is sterile. The germs may be carried into the uterus by the examining finger from the external genitals, vagina or cervix; but this does not constitute self-infection either. We thus see that in every case of puerperal fever, either septic or putrid, the cause is brought to the genitals from without, sometimes during labor or in childbed, or long before confinement.

While distinguishing puerperal fever by infection and puerperal fever by resorbtion, we must keep in mind that both causes often act together, or that infection takes place on a soil prepared by decomposition, and *vice versa;* but these terms best answer the etiology, definition, and prognosis of the affections in question. There is a radical difference between puerperal fever by infection and that from resorbtion, as far as symptoms, prognosis, and treatment are concerned; and the most important matter in practice is the diagnosis, sometimes very easy from the symptoms, in other cases from observation of the course and from the effect of appropriate treatment.

I will now report a case of puerperal fever by resorbtion observed a few months since, which will serve to illustrate the points already mentioned. In order to establish the proof that infection was not derived from the attendant it will be necessary to give a synopsis of what I was doing at the time in question:

November 5, 1891—I delivered a lady, multipara, at 1 A. M.; easy confinement; several vaginal examinations had been made; childbed normal. November 6th—Curetted a uterus for hemorrhagic endometritis; recovery without fever. November 7th—Two minor operations were performed at the German Hospital; no fever. November 8th—Early in the morning I was called to see a case of premature labor at the sixth month. Finding by vaginal examination that there was plenty of time I went from there to Mrs. M——, primipara, in labor pains since midnight, when the water escaped. I reached her at about 4 A. M.; the head had entered the pelvis; os dilated to the size of a 50-cent piece; head in l. o. a. position pressing on cervix, no membranes presenting; child living. Labor progressed well, and at 8:30 A. M. the baby was born. After-birth expressed one-half hour afterward; Credé's method, placenta total, membranes somewhat irregular in shape and torn. Superficial laceration of fourchette quite extensive, superficial lacerations of both nymphæ at their bases. The wounds being superficial, and not bleeding, no suture was considered necessary. In the evening puerpera felt well; had urinated; pulse slightly raised 92; temperature normal. The same evening I made another examination of the premature case. Early on November 9th I was called to a 3-para, who was delivered at 9 A. M.; childbed normal. At about the same time the premature baby was born, Dr. Rohling attending; childbed normal.

Owing to some unfortunate circumstances Mrs. M's nurse had left her, and as another nurse was not at once obtained, no vaginal injections had been made that day, as ordered. I saw the patient in the evening, and found the temperature (in axilla) a little above 100° F., pulse 108, feeling well, no pain on pressure, no odor, wounds looked unchanged. November 10th, at 9 A. M. T. 104° F., P. 132, puerpera, had not slept any, was restless, had had slight chills, headache, no appetite; some sweating; abdomen was not tympanitic, uterus sensitive; there was some swelling at the vulva, and the lacerated wounds looked discolored and grayish. A vaginal douch of a 1 per cent. lysol solution was given, the wounds painted with iodine and the uterus washed out with ½ per cent. carbolic acid solution. Irrigations of the vagina every two hours with weak lysol solution were ordered; no other treatment. At 4 P. M., the temperature was 104.4°, pulse 140; status otherwise the same.

Irrigations in vagina continued. At 10 P. M. temperature 103.3°, pulse 132, patient still restless, complained of headache, slept very little. The antiseptic was changed, boric acid and permanganate of potassium being used, and the wounds powdered with iodoform; patient recovered rapidly and was without fever in three days; no exudation had taken place and the wounds cleared up and healed.

On seeing a temperature of 104° F., and a pulse of nearly 140 on the third day of childbed, I, of course, felt quite uneasy; but having attended two confinements just before and after without fever, and having taken careful antiseptic precautions, I could not believe that I had infected the patient. Through some unfortunate accident infection might have taken place, yet I cannot remember having ever seen a temperature of 104° from ulcerations of the vulva and vagina, and was not ready to accept the high temperature from this source only. I was rather of the opinion that resorption from the endometrium had occurred, due to parts of the torn membranes that might have been retained. But irrigation of the uterine cavity did not confirm this view. From the course of the affection and the prompt effect of mild treatment (vaginal injections) I feel justified in pronouncing this a case of puerperal fever by resorption. I am unable to say what caused the decomposition of the uterine secretions, but they certainly were retained in the vagina, and resorbed by way of the superficial wounds. The following conclusions, based on the case reported this evening and on an extensive obstetrical experience, are formulated:

(1.) Puerperal fever, by infection, can and must be prevented by careful and strict disinfection of hands, instruments and everything about the attendant.

(2.) To prevent puerperal fever by resorbtion thorough cleansing of the external genitals of the patient is necessary; preliminary vaginal irrigations are useful only in cases of purulent discharge.

(3.) It is wise to unite by suture any more extensive lacerations of vulva and vagina, even if they are only superficial; frequent douches with mild antiseptic solutions must be used; sublimate should not be employed.

(4.) In the management of childbed, observation of pulse and temperature will give warning if anything be wrong. By careful analysis of the symptoms we will be enabled to make an early differential diagnosis and take such therapeutic steps as the case will require.

913 Sutter street.

CASE OF TRACHEOTOMY IN A CHILD UNDER TWO YEARS OF AGE—RECOVERY.

By R. L. Rigdon, M. D., San Francisco, Cal.

On the 12th of last February I was hurriedly summoned to attend a child who, the mother said, was choking to death. Taking with me a tracheotomy tube and other necessary instruments I repaired to the house immediately, and upon examining the patient found the mother's statement to be no exaggeration. The child was reported to have had measles two weeks before, but had recovered from the attack and was feeling well. Four days previous to my visit the mother noticed he was hoarse. This symptom had rapidly become more pronounced, until the voice was completely lost.

When I reached the bedside the patient was cyanotic, breathing difficult and noisy, decided retraction of the chest-walls upon inspiration, and all the signs of marked stenosis of the larynx. The fauces and tonsils were free from exudation, glands but slightly implicated. The diagnosis of membranous croup was made, and the parents advised of the hopelessness of trying to gain relief by the administration of medicine. It required no practised eye to see that death was imminent, and when the statement was made that an operation upon the throat would almost surely give relief and might save life, I was requested to do as I thought best.

Assistance was immediately sent for and preparations made to perform tracheotomy. In a few minutes an additional laryngeal spasm came on and breathing was suspended. Seeing that death would supervene before help could arrive I felt obliged to proceed with the operation, hurriedly and unaided. When the tube was inserted respiration was reëstablished, and the transition from a state of extreme suffering to that of tranquil repose was very marked. The tube was removed on the fifth day, and complete recovery soon followed.

The diagnosis of membranous rather than diphtheritic croup was somewhat shaken by the fact that marked paresis of the palate muscles occurred, evidenced by the return of fluid through the nostrils upon attempting to drink. None of the other children in the family have been attacked.

There are several points of interest in this case. At the time of the operation the child was 17 months and 3 weeks old. Recovery at such an early age is rare. The surroundings were of the poorest kind, and the nursing decidedly unskilled. Very little medicine was used, and that was administered irregularly. Recovery occurred in spite of all these adverse circumstances.

51 Third street.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal., and

HENRY GIBBONS, JR., M.D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Surgical Intervention in Periuterine Hematocele.—Of the two methods of treatment open to the physician in cases of hematocele, viz.: the expectant treatment and surgical interference *per vaginam*, or by abdominal incision, the first method is preferred by most physicians and nearly all surgeons, while the second is strongly advocated by DR. PAUL REYNIER. Granted that the expectant treatment effects a cure in many cases, it is still unable to remove the cause, and, therefore, cannot prevent a return of the disease, so that an operation, under the most unfavorable circumstances, often becomes finally necessary. When hematocele is not caused by the rupture of an extrauterine pregnancy, it is generally, if not always, due to lesions of the annexa, and of the six cases upon which Dr. Reynier's article is founded, two were caused by tubo-peritoneal gestation and four by hemorrhagic salpingitis, following, according to the researches of M. Pelhit, undeveloped tubal pregnancy. But hemorrhagic salpingitis cannot occur without a diseased condition of the tube, and the consequent obliteration of the uterine orifice, and as long as the diseased annex remains there is constant liability to a return of the hematocele. An operation not only rids the peritoneal cavity of the bloody accumulation, but permits the removal of the exciting cause of the trouble, thus preventing relapse. By an early operation we may hope to cure our patients in fifteen or twenty days, while the expectant treatment obliges them to remain in bed two or three months at least —a consideration not without importance to most women. The earliest period at which the operation can be performed is, of course, the time most favorable to the avoidance of suppuration and conducive to the patient's chances of recovery. Surgical intervention being decided upon, it is necessary to choose between the vaginal and the abdominal operation. The former is most in favor, especially at Lyons, where M. Laroyenne opens nearly all sauguineous or purulent accumulations by the vagina. And it may be that this method is preferable in long-standing or suppurative cases, where all that is necessary is to afford an outlet for the pus, as the modifications of the annexa caused by suppuration generally suffice to insure their subsequent quietude; but when the disease is recent, and suppuration has not taken place, the abdominal method secures the best results. The abdominal incision made, this operation consists in opening the tumor, removing the blood, the clots by the hand and the liquid by sponges, extirpating the diseased annex or annexa, and washing the cavity with boric acid and water until the fluid returns perfectly colorless. If the cleansing has been sufficiently thorough, the wound may be closed without drainage.—*Journal de Médicine de Paris*, April 10, 1892.

Puerperal Psoitis.—DR. WM. GOODELL says the history of the cases of this disease which have come under his observation may be summarized as follows: (1) A tedious labor in a woman of previous good health. (2) Pain commencing in either side of the hip or groin and running down the thigh along the course of the sciatic nerve usually. (3) Increased rapidity of pulse, loss of appetite, dry skin, furred tongue. (4) Rise of temperature varying from 100° to 104° F. (5) Tenderness deep in either iliac fossa. (6) Flexion of the thigh upon the abdomen. (7) Pointing of abscess above the crest of the ilium, at the base of the lumbar region, in the groin, or on the inner aspect of the thigh. The differential diagnosis of this inflammation from inflammation of the Fallopian tubes, broad ligaments, ovaries, or pelvic peritoneum and connective tissue, can be determined by the following signs, which do not occur in pelvic inflammation: (*a*) Flexion of the thigh, which amounts to a fixation of the limb in a flexed position; (*b*) tenderness quite limited to the psoas and the iliacus muscles, increased by attempts to straighten the limb; (*c*) pain increased by attempts to straighten the limb, and shooting down the sciatic and other nerves of the thigh and leg; (*d*) unilateral character of the pain and tenderness. It may generally be distinguished from inflammation of the tubes, ligaments or connective tissues of the adnexa by the fact that the mobility of the structures is found by bimanual exploration to be unimpaired. The uterus, however, may be greatly enlarged, subinvoluted, in consequence of the general systemic disturbance which follows an inflammation localized in the psoas muscles. The cause of puerperal psoitis and abscess is found, I think, in injury done by the head and shoulder of the child *in utero* pressing upon the muscle and rectum, which favors the passage of microörganisms from the rectum to the softened muscles.—*Medical Age*, February 10, 1892.

Treatment of Uterine Tumors.—DR. CHAS. A. L. REED concludes a paper upon this subject as follows: (1) All persistent hemorrhagic cases of uterine myomata, of whatever variety, should be advised to early operation. (2) In young subjects with multinodular tumors, giving rise to alarming hemorrhage, the appendages should be removed, when practicable, as an alternative to total extirpation. But the latter operation should be done whenever the character of the growth will permit of its removal by dangers less than those which would be involved by its continued existence. (3) To those tumors already recognized as demanding operation should be added those of uterine development that are liable to dangerous constriction by the uterine walls, and of which their destruction by this means might mean sepsis. (4) All cases of subserous growth, indolent, yet progressive in character, in which the tumor has become a menace to neighboring organs, should, whether hemorrhagic or not, be advised to exploratory incision with reference, first, to removal of the appendages, and second, of the neoplastic organ. (5) All growing tumors occurring in women after the menopause, should be removed, if possible, by vaginal total extirpation, or, if that be impracticable, by abdominal section. (6) All distinctly operable cases demanding interference, should be advised to submit to operation at the earliest practicable moment.—*American Gynecological Journal.*

Fibrous Mammary Tumors.—DR. CHARLES M. DOWD believes: (1) It is often impossible to distinguish fibrous mammary tumors from sarcomata, or carcinomata. (2) The occurrence of metastatic growths in or about fibrous tumors; the sudden malignant growth of tumors that have existed for years as quiescent nodules, presumably fibrous; the change of wens into epitheliomata; the apparent change of uterine myomata into sarcomata; the apparent etiological relation between puerperal mastitis and cancer; the opinion expressed by high authorities—form a mass of evidence which would lead us to believe that fibrous mammary tumors may occasionally change to malignant ones. This change, however, is probably not very common.—*Medical Record*, April 16, 1892.

The Operative Treatment of Extrauterine Pregnancy in the Later Months of Gestation.—PROF. FROMMEL reaches the following conclusions in connection with this subject: (1) In well developed cases of advanced extrauterine pregnancy operative interference is always indicated. (2) Total extirpation of the sac should be aimed at, whereas a stitching of the sac to the abdominal wound should only be resorted to in cases of necessity. (3) It is not advisable to delay the extirpation until the death of the fetus, but to operate upon every case of extrauterine pregnancy as early as possible.—*Medical and Surgical Reporter*, April 30, 1892.

Menstruation Among the Insane.—DR. HELEN W. BISSELL concludes: (1) That there is no entirely regular menstrual history if a number of years be taken into account, and that periods falling in from between three and five weeks are to be considered normal. (2) That normal menstruation is an expression of the general condition, and that its suppression is often only an indication of the needs of the system, and so a conservative act of nature. (3) In the chronic insane the menopause makes no radical change in the form of the disease. (4) In acute cases menstruation returns with regained general health, and is an indication that the system can again sustain a loss of force. It is always to be regretted when there is not at the same time increased mental vigor. (5) Tonics and general measures are as a rule preferable to direct or local treatment, though sometimes both are valuable. (6) The underlying conditions which cause irregularities of menstruation are oftener the cause of mental disease than those deviations *per se.*—*Northwestern Lancet*, April 15, 1892.

Ectopic Gestation.—(1) There is considerable—may we not say incontrovertible—evidence that a strong probability of ectopic pregnancy can be discovered in the prerupture stage. (2) The diagnosis in the prerupture stage can seldom, if ever, be absolute. (3) We are not justified, before rupture, in an immediate laparotomy, on a suspicion however strong, unless there are peculiar and unusual conditions that will not warrant delay. (4) Electricity has proved itself, in intelligent hands, comparatively safe, often efficient, and is, in the prerupture stage, worthy of careful trial. (5) We should be prepared to do a laparotomy at any time if rupture supervenes, or if other considerations make operative interference necessary.—*New York Journal of Gynecology and Obstetrics*, January, 1892.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.,

J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and

G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Complete Absence of Urethra—Operation and Cure.—DR. C. H. VOORHIES reports the case of a child apparently healthy, robust, and perfectly formed, in whom 13 hours after birth a malformed penis, with no opening into the bladder, was discovered. A tenotome was introduced, beginning at the meatus and directed downward and inward to a point beyond where the ejaculatory ducts should open into the urethra, where the canal was struck. A probe passed readily into the bladder relieving the accumulation of urine. The probe was passed for several days, after which the child was able to void its urine alone, and is now a stout, fat and well developed baby. The child's penis at birth presented the appearance of one who had been circumcised, or operated upon for phimosis. It was about one inch in length; the foreskin drawn back and notched upon the top. The glans and testicles were well formed and healthy in appearance. The question presents itself: Will this child, when grown to manhood, be able to beget children? Will nature restore the opening of the ejaculatory ducts into the canal made by human hands.—*Medical Record*, March 12, 1892.

Subcutaneous Suture of the Patella.—MR. ARTHUR E. J. BARKER describes this method as a permanent subcutaneous suture, only for recent fractures. Under strict asepsis a narrow-bladed knife is thrust into the joint edge upwards in the middle line of the ligamentum patellæ at its attachment to the lower fragment. As the knife is withdrawn the skin wound is slightly enlarged to about two-thirds of an inch. Through this wound a stout-handled pedicle needle is thrust into the joint behind the lower fragment, and is pushed upward behind the upper fragment and through the quadriceps tendon in the middle line, as close to the border of the bone as possible. The point of the needle is drawn upwards and an incision two-thirds of an inch in length made downwards into the joint cavity. The eye of the needle is threaded with carbolized silk or wire, and is withdrawn, carrying the thread behind both fragments. The needle again unthreaded is passed through the same skin wound below and out of the upper wound in front of and close to both fragments. It is again threaded with the other end of the suture and withdrawn, the thread forming a loop over the upper borders of the upper fragment, and both ends hanging out of the lower wound. The upper fragment is forced down until the fractured surfaces are both in position; the sutures are then pulled firmly and tied or twisted on the lower border of the patella. The wounds made require neither suture nor drainage; they are covered with an antiseptic pad, and the whole joint enveloped in salicylic wool and evenly bandaged. The limb is put on a long back splint. The patient should be kept in bed with ice bags over the knee until the skin wounds are healed, which takes place usually under one dressing and without a drop of suppuration. At the end of ten days the splint is removed and passive motion applied; at the end of a fortnight he is allowed to sit up. Five weeks from date of injury patients are able to walk firmly, and no trace of the line of union can be made out.—*British Medical Journal*, February 27, 1892.

Separation of the Epiphysis at the Head of the Femur.—In a report of three cases DR. E. H. BRADFORD says: The lesion appears to be quite rare and the diagnosis not easy unless an anesthetic is used. The shortening, though present, is not always recognizable, except on careful measurement. No fracture can be determined by ordinary palpation, and slight motion of the limb is possible, though accompanied by pain. The symptoms of pain in the separation of the epiphysis are often not greater than what is seen in cases of synovitis of the hip-joint following severe injury or sprain. In 84 cases of fracture of the neck, collected by Smith, the youngest occurred at the age of 29 years. Hyde collected 61 cases of fracture of the neck, the youngest being 19 years of age. As the epiphyseal union is said to take place at the head of the femur, at the age of 18, this case of Hyde's should be classed as a fracture. The treatment of this condition, where it is recognized, consists in the ordinary treatment of a fracture, the prognosis being unusually favorable. Where not recognized, and union has taken place, with the resulting deformity, operative interference—osteotomy of the neck of the femur—has been performed with success. The operation is not dangerous, and recommends itself in all cases of marked deformity, as a means of curing the disfiguring limp.—*Boston Medical and Surgical Journal*, March 3, 1892.

Delayed Union and Ununited Fracture.—In a report of six successful cases DR. J. WILLIAM WHITE classifies them as delayed or tardy union, and those of non-union, ununited fracture or pseudarthrosis. In the majority of cases the cause is local, and due either to faulty bandaging, or the use of splints which do not prevent motion between the fragments. Constitutional conditions have little bearing upon a case. In direct violence, portions of muscle torn and lacerated by the ends of broken bone, may be driven between the fragments. When due to muscular action, atmospheric pressure forces the soft parts between the fragments. Foreign bodies interposed between fractures may be introduced from without, or consist of a necrosed portion of the bone itself. The humerus and femur are the most frequent seat of non-union; next in order come the bones of the leg, and then the bones of the forearm. In attempting to overcome the failure to unite, the following methods of treatment seem worthy of trial: (1) Manual friction, followed by immobilization of the fragments. (2) The use of an apparatus permitting motion, with the idea of securing the development of callus through irritation. (3) Fixation of the fragments by means of a steel or ivory pin. This applies to those cases in which no foreign body intervenes between the ends of the bones or in which such body has been thoroughly removed. (4) Resection of the fragments and the subsequent application of proper splints retaining them in position. (5) Resection of the fragments and their retention by means of a metallic plate and screws, thus securing at once fixation and a certain amount of irritation to the ends. This applies to long-standing cases with marked atrophy of the extremities of the bone, or in which there is considerable difficulty in immobilizing the fragments. The wire ligature is extremely unsatisfactory, the good results following its use being due to freshening of the ends and subsequent application of proper splints or other dressings.—*International Medical Magazine*, February, 1892.

Operative Treatment of Hip Disease.—CAPONOTTO has treated tuberculosis of this joint, with good results, by injections of iodoform. In order to afford free access to all parts of the diseased articulation, the joint is opened and a part of the head of the femur removed. An incision three inches long is carried from the top of the great trochanter towards the posterior inferior spine of the ilium, cutting through the muscles and capsule, on to the head of the femur, about two-thirds of which is then removed with hammer and chisel, whether the bone be diseased or healthy. Sufficient space is thus established between the opposite bones of the joint to permit of removal of diseased synovial membrane, and also of any sequestra or tuberculous deposits in osseous structure, and o subsequent distension of the whole of the diseased articular cavity by injected fluid. After this cavity has been filled with freshly prepared iodoform emulsion, the soft parts are brought together with sutures, and the limb is placed in good position, though not, unless in very exceptional cases, extended by weight. *British Medical Journal*, February 27, 1892.

A New Incision for Resection of the Astragalus or Calcaneum.—A new method of removing the astragalus or calcaneum is described by BOGDANIK, in which neither arteries nor tendons are divided. The surgeon, standing on the right side of the patient, begins his incision just below the malleolus—the internal one on the right and the external one on the left foot—and carries the knife obliquely downwards and backwards, crossing the heel about half an inch above the sole to the tip of the malleolus on the opposite side. This cut having been carried down to the bone, the os calcis is sawn through obliquely without any disturbance of the soft parts. The anterior portion of the foot being then forced upwards, in front of the leg, and the joint between the calcaneum and astragalus exposed and laid open, the latter bone may be seized with forceps and removed. If the incision be extended a little upwards on either side along the tendo Achilles, the posterior fragment of the calcaneum can be elevated. If this bone alone be diseased, the disorganized parts can be removed without further disturbance of the soft structures. After removal of the astragalus, the articular surfaces of the tibia and fibula may be dealt with if diseased. By this method the author has removed the whole of the astragalus in one case and a portion of the calcaneum in another without injuring any tendon or large vessel, and with scarcely any loss of blood. The following advantages are claimed for this: (1) The wounding of the soft parts is much restricted. (2) The vessels, tendons, muscles and nerves escape injury. (3) The cicatrix lies in the most favorable position. (4) The configuration of the foot is preserved.—*British Medical Journal*, February 20, 1892.

Diffuse Hypertrophy of the Breasts.—DR. J. C. B. PORTER reports the case of a patient, aged 37, who had borne two children, the youngest 10 years old. She had ordinary health up to three months prior to admission to hospital, at which time her catamenia ceased. Three years ago the breasts commenced to enlarge, the left being affected three months after the right. During the past three months a rapid increase had taken place, which prevents work, and she could only stand for a short time. In the recumbent posture respiration is embarrassed, so much that a frame was made upon which the breasts could be suspended. There was never any pain. Both breasts were enormously enlarged. Right breast, largest circumference, 38 inches; length from chest-wall to nipple, 17 inches; circumference at base, 23 inches. Left breast, largest circumference, 28 inches; length from chest-wall to nipple, 14 inches; circumference at base, 23 inches. Skin edematous, thickened and porky. Throughout both are to be felt movable, hardened masses of irregular outline, varying in size from an orange to a closed fist. The left breast was removed first. Two large skewers transfixed the breast vertically and horizontally, behind them was placed a tightly-drawn rubber tourniquet. An anterior and posterior flap was made and the breast removed. All vessels large enough to be recognized were tied with sterilized silk before the tourniquet was loosened and little blood was lost. The operation was done in the sitting position. Continuous silk suture closed the wound, with bone drainage. Ten days after operation the wound was solid and dressed with collodion for support. Three weeks after the first operation the remaining breast was removed in the same manner. In ten days the dressings and sutures were removed. Two weeks later the patient left the hospital and took a cold, perilous sea voyage. Her physician was called to dress two small spots where the cicatrix had given away; she developed erysipelas and aborted a five to six months' fetus and died three months afterwards in collapse. Microscopic examination showed the bulk of the growth to be made up of fibrous tissue, rich in cells, and holding in its interstices considerable thin, serous fluid. Imbedded in this were gland acini and ducts widely separated, and into the openings of which the fibrous tissue had forced its way. In structure, the growth was essentially a diffused intracanilicular fibroma, and was not in any sense a true hypertrophy of the breast. In an analysis of 19 cases it would seem that the disease develops mostly at the age of puberty, that nothing short of removal is available, and that a fatal result may occur in 1 out of 16.—*Boston Medical and Surgical Journal*, March 3, 1892.

Ununited Fractures in Children.—DR. D'ARCY POWELL says ununited fractures are undoubtedly rare in children. Of 71 cases collected, 7 occurred in the clavicle, 9 in the humerus, 12 in the femur, 42 in the leg, and only 1 in the forearm; a result which is very surprising, when it is considered that statistics show the forearm to be more often broken than any other bone in the child's body. In the entire 71 cases, firm bony union was only obtained in 6 children, whilst of the others some remained in their former condition, some received slight benefit from a prolonged and often hazardous course of treatment, while others underwent amputation in order to be relieved of a limb which was worse than useless. The cause of non-union of fractures in children is local, and is due to want of rest. The treatment of fractures in children resolves itself into the following rules: Diagnosticate the fracture as early as possible, and in every case keep the fragments in perfect apposition. After the fragments have been secured, see that this is maintained by exercising careful supervision, and, when necessary, by the readjustment of the retention apparatus. As in cases of adults, so in children, the most successful treatment of fractures depends upon attention to details. In cases where non-union has occurred the prognosis in regard to subsequent union is very bad. In such cases the ends may be resected, and the fracture treated by securing perfect immobility of the bone for a long period. If, however, there has been much wasting of either end, it will be found that resection is useless. In the bones of the upper extremity the resulting fibrous union, judiciously aided by a light artificial support, will occasionally enable the patient to pass his life in tolerable comfort. Under similar circumstances, in the lower extremity, however, it will often happen that amputation alone affords the patient relief from his miserable condition.—*American Journal of Medical Sciences*, May, 1892.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

Removal of Foreign Bodies from the Ear.—DR. OLIVENBAUM (*Norsk. Mag. for Leagevidenskaben*) reports the removal of foreign bodies from the ear by the following method: Powdered alum is heated over a lamp; a wood splinter is dipped into the alum, quickly introduced into the meatus, placed on the foreign body, and allowed to remain till adherent, when on withdrawing it the foreign body is brought away.—*International Medical Magazine*, May, 1892.

Relations of Micro-organisms to Cataract.—Referring to the statement of Galippe that microörganisms are usually present in cataracts, DUBIEF (*Annales d'Oculistique*) publishes the records of several investigations which he has recently applied to the solution of this question. The lens having been removed with the utmost care and antiseptic precaution, it was in each case washed in several changes of sterilized water in guarded sterilized tubes, and then placed in a tube of sterilized bouillon and broken into bits with a glass rod. These portions were employed to inoculate a series of tubes of nutrient materials; and, besides, the water in which the lens had been washed served to inoculate another series of tubes in each case. The writer states that in almost every instance those tubes which had been inoculated with the cleansed lens-particles remained sterile; those, however, inoculated with the wash-water were found growing a variable number of colonies, those inoculated with the first water used containing the greatest number of colonies. These results confirm the views expressed by a number of writers upon the subject, that whatever bacteria are to be found in such investigations are probably the result of contamination from the conjunctiva, or from the external air.—*International Medical Magazine*, May, 1892.

Direct Application of Hot Water in Corneal Affections.—LIPPINCOTT (*Ophthal. Review*, March, 1892), reports excellent results obtained from the repeated use of water at a temperature of 150° F., applied directly to the affected area in cases of obstinate corneal ulcer, and in one case of suppuration of a corneal wound. The ordinary remedies, both local and general, had been tried without much benefit. He advises heating the water in a test-tube also containing the dropper to be used, and in making the application to allow six to eight drops to fall singly and at one or two seconds interval upon the affected cornea.—*Brooklyn Medical Journal*, May, 1892.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

The Treatment of Cystitis with Mercuric Chloride.—GUYON (*Annal. des Mal. Genito-Urinaires*, xi.) recommends mercuric chloride in the treatment of cystitis. The results are especially good if the cystitis be tuberculous. Irrigation or instillation may be employed. The mercurial solution may vary from 1:500 to 1:1000. At first from 20 to 30 drops are instilled, by means of a syringe, into the prostatic urethra, the quantity being gradually increased to a drachm. The bladder must be evacuated after each instillation. In gonorrheal cystitis, good results were obtained from instillations of silver nitrate 1 or 5:100.—*Münchener med. Wochenschrift*, No. 5, 1892.

A Method of Curing Chronic Gonorrhea.—DR. A. E. ROCKEY advances the idea of curetting the urethra in long standing cases of chronic gonorrhea, and has invented for this purpose an instrument whose end, shaped like a sound, contains holes, whose edges are sharpened to more perfectly scrape the mucous membrane. With this instrument for deep curetting, and a veritable spoon curette for shallower work, the author claims most beneficial results. After the curetting, under cocaine anesthesia, antiseptic injections, in diminishing strengths, are used for several days. First, an injection of nitrate of silver, 10 gr. to the ounce; then solutions of chloride of zinc, 3, 2 and 1 grain to the ounce, diminishing by a grain each day. He states that by this method he has easily cured cases of years' standing.—*Journal American Medical Association*, May 7, 1892.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

Treatment of Convulsions by Compression of the Carotids.—M. ROHEIM (*Bull. Gén. de Thérapeutique*) reports a case of eclampsia treated with success by this measure after other means had failed. The patient was a robust man, aged 56, suffering from cancer of the bladder, with occasional hematuria. Pressure was made over the carotid, by means of the index and middle fingers, between the larynx and sterno-mastoid muscle, from before backward, against the vertebral column. He thinks the value of the treatment lies in the fact that, in compressing the carotid, we at the same time make pressure on a fasciculus of the sympathetic, which lies parallel to the artery.—*International Medical Magazine*, May, 1892.

Corrosive Sublimate in Tetanus.—DR. CELLI reports (*Arch. Ital. di Péd.*) a severe case of traumatic tetanus, in a child, successfully treated by means of subcutaneous injections of corrosive sublimate. At first free incision and antiseptic dressings were tried, but the symptoms steadily grew worse. Hypodermic injections of corrosive sublimate were then resorted to—a method of treatment first practised by Baculo. Nine injections, each containing 0.005 gramme

($\frac{1}{12}$ grain) were given in the course of a week; on the eighth day the patient was perfectly well. As a direct result of this medication, progressive fall in the temperature and in the frequency of the pulse, and gradual increase in the excretion of urine were observed.—*Merck's Bulletin*, May, 1892.

Hydrochloric Acid in the Treatment of Vomiting.—DR. ALKIEWICZ, writing in the *Nowiny Lekarskie*, mentions that in various kinds of vomiting he has found great benefit from small and frequent doses of hydrochloric acid, well diluted of course. In one case of the vomiting of pregnancy, where none of the ordinary remedies had any effect, hydrochloric acid proved successful, though it had to be given for a fortnight before it entirely arrested the sickness. In more than ten cases of cholera nostras in adults, with vomiting, hydrochloric acid was given with good results. Again, where vomiting was due to acute dyspepsia from errors in diet, and where it occurred in the course of influenza, scarlet fever, or other contagious diseases, the same remedy proved equally efficacious.—*Lancet*, May 7, 1892.

Electrolysis in Nasal Catarrh.—FLATAU (*Wien. med. Woch.*) strongly recommends electrolysis in chronic nasal catarrh. By carefully regulating the current employed it is possible to produce satisfactory results with this method, with a relatively small destruction of the surface and of the serous and mucous glands. He has found it in no way inferior to the more heroic methods of treatment hitherto adopted.—*British Medical Journal*, May 7, 1892.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

The Treatment of Hemiplegia.—DR. WILLIAM M. LESGYNSKY, in discussing this subject, speaks of hemiplegia as being symptomatic in the vast majority of cases of rupture of an intracranial blood vessel, and as essentially due to disease of the arterial system. His remarks are confined to hemiplegia in the adult as a result of cerebral hemorrhage. The hemorrhage occurs most frequently near one of the corpora striata. The point of selection is most frequently one of the lenticulo-striate arteries which has developed miliary aneurisms. Hemiplegia is not necessarily so complete as to present a maximum loss of power. Not infrequently the face escapes entirely. Sometimes the leg can be moved perfectly, while the arm is completely paralyzed. Power is usually regained in the leg earlier than in the arm. Cerebral hemorrhage is relatively frequent after the fortieth year, and becomes more common as age advances. There is nothing hereditary about the disease, unless in the indirect result of the inherited tendency to arterial degeneration. That individuals with short, thick necks and florid faces are predisposed to the affection is a popular fallacy. Recovery from hemiplegia will occur from any kind of lesion, if it be a small one. If the patient begins to move the arm the next day, he is likely to get well altogether. When rigidity of the limbs takes place no further improvement will follow. Corresponding to the well-known fact, that in the facial paralysis accompanying hemiplegia, the orbital portion of the nerve is usually unaffected, a similar phenomenon may be observed in the upper extremity in the fibres of the spinal accessory nerve. This nerve divides into two branches, one supplying the sterno-cleido mastoid muscle, and the other the trapezius. As a rule, the branch to the sterno-cleido mastoid escapes, while that supplying the trapezius is paralyzed. The latter paralysis manifests itself in the drooping of the shoulder while at rest. The paralysis in the lower extremity, which is usually neither complete nor permanent, shows several characteristic peculiarities, which explain the fact that walking is still possible, even in severe cases. In such patients, while in the supine position, one can demonstrate that active elevation of the extended leg to a certain height can still be accomplished, although feeble. The dorsal flexion of the ankle joints is nearly or completely abolished, but plantar flexion can be performed with considerable force. In the prone position the flexures of the knee-joint are nearly or completely paralyzed, while the extensors show almost normal strength. Therefore, in hemiplegia the muscles which are especially important in locomotion, are the ones that are least affected. Regarding treatment, it is suggested that a ligature about the extremities, close to the trunk, will prove serviceable in diminishing the volume of blood in the internal organs, thus relieving the intravascular pressure, and hastening the formation of the clots. Absolute rest in bed should be enjoyed, no matter whether the attack be mild or severe in character. In case of unconsciousness the bladder and bowels should be evacuated. When there is difficulty in swallowing, food by the mouth should be forbidden on account of the danger of its entrance into the larynx. A day or two without much nourishment will do very little harm. If it is thought desirable, rectal alimentation may be resorted to. Clinical and experimental investigations prove that we possess no drugs whose administration will hasten the absorption of the extravasated blood or relieve the patient of his paralysis. To prevent bed-sores, the position of the patient must be changed frequently, and either by a water bed or by various mechanical devices, the points that are subjected to pressure must be protected. When the skin shows any redness it is painted with a mixture containing two drachms of oxide of zinc to the ounce of alcohol. As the alcohol evaporates, a thin coating of zinc remains on the surface. A bed sore, due to trophic changes, may occur, however, despite the most careful vigilance. Faradization of the paralyzed muscles keeps up the nutrition and improves the peripheral circulation. The applications are to be made every alternate day, the entire *séance* lasting from ten to fifteen minutes. The strength of the current should be just sufficient to produce slight but evident contractions. In view of the clinical fact that the extensors in the upper and the flexors in the lower extremity are the muscles usually paralyzed, electrical manipulation should be directed in greater part to these groups of muscles. In the presence of contracture, which generally developes later, much can be accomplished by the use of galvanism to the brain and peripheral nerves. The positive pole is placed over the parietal eminence, on the same side as the lesion, and the negative pole over the trunks of the nerves which supply the rigid muscles. The patient should receive from three to six milliampéres, the *séance* lasting from three to five minutes. There is no proof that the use of strychnine, hypophosphites, or the so-called "nerve remedies" directly influence the paralysis. The most potent remedy we possess is a combination of the "essence of patience" and the "tincture of time." We must not delude ourselves in the belief that we can cure hemiplegia.—*New York Medical Journal.*

Cerebral Apoplexy.—Patients with hemiplegia, after apoplectic attacks, usually show the same group of symptoms, viz: inequality of the pupils, and the two sides of the face, slight deviation of the tongue, diminished power in the extremities, contractions and exaggeration of the reflexes. The uniformity of the clinical picture indicates that a definite point in the brain, in the majority of cases, is the seat of hemorrhage. Morgagni found that the seat of hemorrhage in these cases is usually in the corpus striatum and optic thalamus, and later statistics corroborate this observation. The researches of Rosenthal and Charcot show that a small artery (art. corporis striati) is especially disposed to rupture, and was called by the latter, apoplectic artery (*Artere d'hémorrhagic cérébrale*). **PROF. MENDEL** has sought to determine why hemorrhage usually occurs in the district supplied by this artery. According to this writer, two conditions are necessary for apoplexy: (1) Previous disease of the arteries. (2) Sudden increased blood pressure, which causes rupture of the diseased arterial wall. In connection with the first condition, it was originally shown by Cruvelhier, and subsequently by Virchow and Charcot, that the arteries which ruptured in cases of apoplexy were the seat of miliary aneurisms. Mendel found in his investigations that the arteries distributed to the white substance and the larger ganglia of the brain are without anastomoses, "end arteries," whereas, the cortical arteries freely anastomose. This difference is, without doubt, of some influence on the blood pressure in the brain, and physical experiments demonstrated that all conditions being equal the pressure is greater in the end arteries than in the cortical arteries. If the arteries are diseased, rupture must first occur in the end arteries. The infrequency of hemorrhage in the course of the vertebral artery is explained by the extensive anastomosis of the basilar artery. Having explained why hemorrhage is most frequent in the art. corp. striati, the next point to consider is, why this artery is the frequent seat of miliary aneurisms. The fact that every elastic tube, when subjected to pressure, is not only increased in width, but in length, is applicable to the arteria corporis striati. The repeated dilatation of the artery eventually results in atrophy of the muscular coat and the formation of miliary aneurisms, which, under increased pressure, burst. Apoplexy, in a number of cases, results, not only from direct arterial pressure, but from interference with the onward flow of the blood. Inasmuch as the arteria corporis striati is emptied with more difficulty than the cortical arteries, it follows that rupture occurs with greater frequency in the former situation. Regarding the therapeusis of apoplexy, the author observes, that the ice bladder to the head has taken the place of bleeding. He considers the procedure as irrational. Cold to the head does not arrest the bleeding, but on the contrary, increases it. It renders the peripheral arteries anemic, and the cerebral vessels hyperemic. Elevation of the head and absolute rest are more rational procedures.—*Berliner klin. Wochenschrift.*

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane,
Stockton, Cal.

Prognosis in Mania.—DR. WILLERDING, of the Hildesheim Asylum, gives the results of his observations in 322 cases, embracing all forms of mania. Of these 70 per cent. recovered within a few months. He found that neuropathic heredity did not have an unfavorable influence upon prognosis. In mania following slight cranial trauma the prospects of recovery are good, and this is also true in mania of an organic, alcoholic or puerperal nature. The chance of recovery is also greater the younger the patient. Return of menstruation coincident with slight psychic improvement is an almost certain sign of ultimate recovery. Among symptoms influencing the prognosis unfavorably are: Convulsions and paralytic phenomena, the gravity of the case itself, periods of sudden excitement in the course of puerperal mania, or in mania following slight cranial traumatism, and abrupt cessation of mania. A sudden termination suggests the strong probability of a speedy relapse or a transition into periodic mania. A notable increase in weight before the mental abnormity has disappeared is an unfavorable sign. Prognosis in periodic mania is always discouraging; in such cases a definite and complete recovery is seldom met with. After a certain number of attacks of mania, of whatever kind, there is marked weakening of the intellect. Early restraint has a most beneficial effect upon the course of the disease.—*Lancet-Clinic*, February 27, 1892.

Degeneration of the Solar Plexus in the Insane.—It has been found by experiments on animals that destruction of the solar plexus is followed by glycosuria, acetonuria and albuminuria. These facts led DR. CRISTIANI to examine the urine of mental patients suffering from degeneration of the solar plexus, a lesion which has been found by him to be evidenced by a so-called vaso-paralytic diarrhea. He compared the results of the examination of the urine of 10 such patients with those obtained in 15 cases of simple intestinal catarrh and in a similar number of patients without diarrhea. Glycosuria and albuminuria were present in the first 10 patients, while these conditions of the urine were absent in 30 others examined. These two symptoms seem, according to a large number of observations by the same author, to be very rarely present in asylum patients not suffering from nervous diarrhea. Acetonuria, which is a constant and lasting phenomenon after experimental lesions of the solar plexus in animals, was entirely absent in the cases observed. The glucose and albumin would however, be found either separately in different cases or together. They were not constant in appearance as to any period in the course of the disease; but the fact that daily analysis of the urine would reveal their presence in disease of the solar plexus and absence in other related diseases, makes the dual symptom of value in the diagnosis and prognosis of this form of diarrhea.—*Medical and Surgical Reporter*, February 13, 1892.

Typhoid Fever and Insanity.—Four cases of typhoid fever, followed by symptoms of mental disease, have been reported by M. JOFFROY. In the first case delusions developed during convalescence. In the second case, the patient had been subject to attacks of hysteria prior to the typhoid fever, during the course of which delusions showed themselves, some of which persisted. In the third case the typhoid fever was followed by dementia. The last case was one of paraplegia, preceded by typhoid fever. M. Joffroy thinks that the typhoid fever poison is more powerful in producing insanity than that of any other infectious disease.—*Progrès Medical.*

Cancer in Relation to Insanity.—DR. HERBERT SNOW concludes, from an extended inquiry into the relation of cancer to insanity, that: (1) Cancerous disease among the insane is rare; among individuals with congenital mental deficiency, it seems to be almost wanting. (2) Cancer is not increasing in frequency among the insane, a fact of importance in connection with the view of cancer as a disease of civilization, largely caused by depressive mental emotion, whose greater prevalence in recent years has been explained on the ground of the increased wear and tear which life in the nineteenth century involves. (3) Though cancer is rare among the insane, it not uncommonly precedes and causes mental derangement without the formation of a cerebral tumor. It should, therefore, rank among the recognized causes of insanity.—*Journal of Mental Science—Journal American Medical Association*, January 30, 1892.

FORMULÆ.

By Geo. B. Somers, M. D., San Francisco, Cal.

Otalgia.—The late Dr. Zeile, of San Francisco, was wont to prescribe the following:

Ol. cajeput ------------- ʒ ss
Ol. hyoscyami cocti ----- ʒ ss
Ol. olivæ --------------- ʒ iii—M.

S.—For external use. A few drops to be placed in the ear.

To Deodorize Iodoform.—The *Netherland Pharmacopeia* gives:

Carbolic acid	1 part
Oil peppermint	2 parts
Iodoform	197 parts

—*New York Medical Journal.*

Subacute Eczema.—Bulkeley advises the use of tar ointment. The officinal preparation is too strong for general use, but diluted as follows makes an elegant and effective preparation:

Ung. picis --------------- ʒ ii
Ung. zinci oxidi ---------- ʒ ss
Ung. aquæ rosæ ---------- ℥ iv

—*Boston Med. and Surg. Journal.*

Amyl-hydrate.—This drug dissolves slowly in water. It may be taken at night in beer, or according to the following formula:

Hydrate of amyl --------- ʒ i
Water.
Orange flower water--āā ℥ ii
Syrup bitter orange------ ℥ i—M.

S.—One-half at night.—*Boston Medical and Surgical Journal.*

Pills to Disinfect the Intestines.—(Spoeth.)

Creolin ------------------- ʒ iii
Dilute alcohol.
Powd. gum tragacanth āā ʒ ss
Succus glycyrrhizæ.
Pulv. glycyrrhizæ-----āā ℥ v
For 200 pills.

S.—Take two pills two or three times a day.—*Progrès Médical.*

Salpyrine in Articular Rheumatism.—This substance dissolves with difficulty in water. Henning (*Pharmaceutische Zeitung*) gives:

Salpyrine --------------- ʒ iss
Glycerine --------------- ℥ iii
Raspberry syrup -------- ℥ i
Distilled water-------ad ℥ ii

S.—Tablespoonful every half hour. —*Satellite.*

Recent Recipes for Gonorrhea.—Brindisi employs the following injection:

Antipyrin ----------- gr. xlv
Sulphate of zinc------ gr. iv
Rose water.
Cherry laurel water-āā ℥ ii

Dewees, of Kansas, states that few cases will remain uncured after eight days' use of the following by injection:

Sodium biborate.
Resorcin-------------āā ʒ ss
Glycerine --------------- ℥ iiss
Rose water-------------- ℥ viii

S.—Inject ʒ ii every two hours the first day, then lengthen the intervals.—*Atlanta Medical and Surgical Journal.*

Laryngismus Stridulus.

Chloroform------5 to 10 drops
Water -------------------- ʒ vi
Glycerine ---------------- ʒ ii

S.—Teaspoonful every half hour.—*Nouveaux Remédes.*

Sycosis.—Rosenthal advises:

Tannic acid-------------- ʒ ss
Lactate of soda---------- ʒ i
Oxide of zinc.
Starch --------------āā ℥ ss
Vaseline ---------------- ℥ iss

S.—Two inunctions daily upon the carefully shaved skin.—*Union Médical.*

Ointment for Rheumatic Pains.—Kittl.

White wax---------------- ʒ i
Lard --------------------- ʒ iii

Melt together, and when the mixture is sufficiently cool add—

Chloroform -------------- ʒ i

S.—Spread on compresses, and retain on the painful parts by bandages. The wax preserves the chloroform in the mixture for a considerable time.—*Union Médical.*

Leucorrhea.—HENSK suggests:

Chlorate of potash	ʒi
Tincture of opium	ʒi
Tar water	℥xiv

S.—Two or three tablespoonfuls in a quart of warm water as an injection morning and evening.—*Union Médical.*

Seminal Emissions.

Potassium bromide.	
Tr. ferri. chlor.	āā ʒi
Aq. pur.	ad ℥iv

S.—One or two teaspoonfuls in water one hour after meals and at bedtime.—*Canada Lancet—Medical and Surgical Reporter.*

Diuretin.—In the *Therapeutische Monatshefte* occurs:

Diuretin	ʒiss
Aq. menth. pip.	℥iii
Syr. simpl.	℥i—M.

S.—Tablespoonful five or six times a day.—*American Journal of Medical Sciences.*

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality for April.—The deaths registered in 117 town districts of the State during the past month, in a population of 789,392, correspond to an annual rate of 15.45 a thousand, the total mortality having been 1,018. 104 deaths were due to zymotic diseases, giving an annual rate of 1.58 a thousand. Of these, 26 were due to diphtheria, 6 to cholera infantum, 15 to typhoid fever, 8 to diarrhea and dysentery, 8 to cerebro-spinal fever, 6 to scarlet fever, 11 to whooping cough, 11 to croup, 9 to measles, and 4 to remittent and intermittent fevers. 317 deaths resulted from diseases of the respiratory organs, giving an annual rate of 4.81 a thousand. Of these, 195 were due to consumption, 77 to pneumonia, 35 to acute bronchitis, and 10 to pulmonary congestion, the rate being for consumption and pneumonia respectively, 2.96 and 1.16 84 deaths were due to diseases of the heart. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 495,000 was 18.36 a thousand. The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from San Jose, the lowest from San Diego.

The Monetary Value of Sanitation.—In his annual address to the Medical Society of the State of Michigan, DR. HENRY B. BAKER, Secretary of the State Board of Health, makes some pertinent remarks (*Journal American Medical Association*, May 21, 1892) which it would be an act of wisdom on the part of the citizens of California to observe. After expressing his belief that the compensation of the health officers, generally throughout the State, with but a few exceptions, is ridiculously small and inadequate, and that the best interests of all concerned are injured thereby, and will be best conserved by such a general change as will recognize the fact, as old as the Scriptures, "that the laborer is worthy of his hire," he proposes to prove, at some future time, if it be questioned, that the change would be a good thing for the medical profession in the State. That it would prove beneficial to the sanitary interests of the whole people of the State he has no doubt. The people of Michigan, he says, owe a great debt of gratitude to the philanthropic physicians throughout the State, who have generously performed services for the public which the people generally were not sufficiently informed to ask for, to pay for, or to appreciate, but which have tended to place Michigan in the front rank of sanitary reform. In the evolution of organized society, he is of the opinion that the time has come when it will best serve the people to gradually educate them into a knowledge of the real value of public health work, and into an appreciation of the fact that it is best for corporations and governments, townships, cities and villages, as it has long been known to be best for individuals, not to try to get something for nothing. Such efforts generally lead the individual to the penitentiary, and the government to a penitential mood. The representatives of the people have provided so much work to be done by health officers, and have affixed to the non-performance of the duties such penalties that no ordinary practitioner can, without adequate compensation, afford to take the chances of being held accountable under the law for the neglect of duty. No ordinary practitioner can afford to neglect his practice and do all that the law and public sentiment now expect to be done by the health officer. Owing to comparatively recent changes in the laws, more is usually required of the health officer than he anticipated. For the purpose of informing physicians and the people generally of the nature, extent and importance of the work of the health officer, he suggests that some such method be adopted as those having charge of the school interests have found to be efficient. Estimates are made of the amounts required annually, and the people vote to assess themselves for that purpose. A similar law should be enacted for public health officers. Provisions should be made by those having this branch of the public service in charge, to place the facts before the people at the time the vote is taken. The health officer should be prepared to present to a public meeting of the citizens reasons why expenditures for public health work are in the public interests. It ought not to be difficult to convince the people generally that the lives and health of the people themselves are of more consequence than any other subject for which they collect taxes. They can be informed that consumption, diphtheria, scarlet fever and typhoid fever are communicable diseases, and that they are all preventable through measures which are well known to sanitarians; and further, that reliable statistics, collected by the Michigan State Board of Health, have proved that—even after the disease has been introduced—about 75 or 80 per cent. of the cases and deaths from diphtheria and from scarlet fever are prevented by measures which a good health officer can inaugurate and maintain. The number of lives thus saved to any community, and their actual money value, can be easily computed. Then how much better to save those lives, and to avoid the grief and sorrow which would result from their loss. Again, the money used would only be the amount which, without effort for restriction, would be lost to the city; the actual outlay would not be at all increased. He concludes that any meeting of citizens, of ordinary intelligence, could be made to see that the lack of public health work is a wasteful extravagance, and that it is better to use a certain sum of money to pay a health officer than to permit the death of loved ones that have actually cost as much as that sum, and who, if they die, are a dead loss, in more than one sense.

METEOROLOGY.

By J. W. Robertson, B.A., M.D., San Francisco, Cal.

Summary for April.—*Temperature.*—There were but few unpleasant days and along the coast an unusual freedom from fogs and winds. The mean temperature, both of the coast and valley belts, ranged between 51° and 57°, while the maximum reached above 80° in Southern California. Cool nights, as a rule, were reported, but no ice or snow, though slight frosts were frequent in the valleys.

Rainfall.—There was a deficiency of rainfall; many stations registering but the fraction of an inch. There were also remarkably few days on which rain fell.

California—Tabular Statement for April, 1892.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn .... Cal.	56.7	75.0	41.0	----	----	----	----	3.11	----	----	----	----	N.W.	Southern Pacific Company.
Berkeley .... "	51.2	67.0	38.0	61.3	45.0	16.3	8	1.68	80.0	16	9	5	S.&S.E.	Obs. University of California.
Colfax .... "	48.3	72.0	32.0	----	----	----	----	5.73	----	----	----	----	N.E.	Southern Pacific Company.
Eureka .... "	49.0	60.0	36.0	54.6	43.4	11.2	17	5.54	90.0	5	6	19	N.W.	Weather Bureau Dept. Agr.
Fresno .... "	57.6	80.0	36.0	71.0	44.2	26.8	6	0.79	59.0	18	9	3	N.W.	" " "
Keeler .... "	57.8	83.0	35.0	69.8	45.9	23.9	0	0.00	26.0	16	12	2	N.W.	" " "
Los Angeles .... "	58.6	88.0	40.0	71.2	46.0	25.2	1	0.22	71.0	17	11	2	W.	" " "
Monterey .... "	57.9	80.0	38.0	----	----	----	----	0.82	----	----	----	----	S.	Southern Pacific Company.
Napa .... "	56.0	75.0	39.0	66.8	45.2	21.6	8	2.14	70.0	17	8	5	N.&S.W	Station Napa Insane Asylum.
Oakland .... "	53.0	72.0	38.0	62.1	44.7	17.4	8	1.09	81.0	17	10	3	W.	Chabot Observatory.
Paso Robles .... "	57.4	88.0	40.0	----	----	----	----	0.11	----	----	----	----	S.	Southern Pacific Company.
Red Bluff .... "	54.0	74.0	36.0	64.0	44.0	20.0	15	2.92	70.0	9	16	5	N.W.	Weather Bureau Dept. Agr.
Sacramento. ... "	55.4	76.0	36.0	66.4	44.4	22.0	7	1.20	70.0	11	16	3	S.W.	" " "
San Bernardino "	59.0	89.0	34.0	74.4	43.3	31.1	2	0.37	66.0	20	6	4	W.	A. K. Johnson, M. D
San Diego .... "	57.8	80.0	41.0	66.2	49.3	16.9	2	0.41	74.0	22	4	4	W.	Weather Bureau Dept. Agr.
San Francisco .. "	53.1	68.0	44.0	59.6	46.7	12.9	9	1.39	84.0	17	10	3	W.	" " "
Santa Barbara .. "	57.8	83.0	40.0	69.0	46.6	22.4	2	0.46	65.0	26	3	1	E.	Hugh D. Vail.
Santa Cruz ...... "	55.1	75.0	41.0	----	----	----	----	1.80	----	----	----	----	N.	W. R. Springer.
Yuma .... A. T.	70.0	98.0	41.0	86.0	53.9	32.1	1	Trace	34.0	26	3	1	W.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: JUNE, 1892.

LIFE INSURANCE FOR MEDICAL MEN.

The subject of life insurance is one of exceeding interest to medical men, not only because its study enters into a complete medical education, but because its benefits are greater and more needed than among men of most other callings. It is our purpose to take up the latter feature of this topic, and present some reasons why medical practitioners should avail themselves of equal opportunities with others to insure their lives.

It is presumed that the medical man is married, as most actually are or should be. It is also presumed that he has children, which is generally in accordance with facts, for he is quite sure to acquit himself of the debt due his progenitors by a liberal contribution to posterity. Though the physician, better than others, knows how to practise frauds in procreation, he must be charged with less delinquency of this sort than most other persons. It is found that he usually provides well for his family, especially in the education of his children, that social and charitable obligations are freely discharged, and, finally, that very few are able to leave much wealth to be divided among their successors. The principal inheritance of his children consists in a good name and a large lot of uncollectable bills for services which have shortened his life's span. This is the rule, with just enough exceptions to prove its validity.

Usually the best practitioners are not good business men. These are the ones who collect the lowest percentage of their earnings. They have not time for personal attention to this matter of business, and they are disinclined. On the other hand, those who make their professional life subservient rather to personal gain than to the relief of others, and who know how to make good investment of their earnings, are, fortunately for mankind, in the minority, and generally rank low in professional knowledge. Their families are provided for by acquired property or life-insurance—usually both—and to them these remarks are not addressed.

Now comes another consideration, quite well recognized by life-insurance men, but we think mostly unheeded by physicians themselves: they are not as good risks, in insurance parlance, as other educated men. The researches of MR. OGLE, presented to a recent Congress of Hygiene and Demography, showed that, between the ages of 25 and 65, the mortality among clergymen ranked lowest of all the occupations. Taking this as a standard, with 100 as a number for comparison, lawyers show 152 and physicians 202. Other leading avocations give the following figures: Farmers, 114; grocers, 139; fishermen, 143; merchants, 155; tradesmen, 158; bakers, 172; smiths, 175; laborers, 185; tailors, 189: printers, 193; clerks, 199; quarrymen, 202; butchers, 211; plumbers and painters, 216; omnibus drivers, 267; miners, 331. DR. FARR, the celebrated English Register-General, remarks. "Physicians and surgeons, from youth up to the age of 45, experience a mortality much above the average; after that age they do not approach the priesthood in health, but differ little from the average."

At the outset most practitioners have a hard struggle for a living, and age fast from worry. As business grows, night-work makes the burden particularly heavy. A country practice is made laborious by long rides, and rough by exposure to inclement weather. At all times the medical man must face the dangers of contagious disease. Thus DR. OGLE finds that the relative deaths of physicians to those of the population at large from the leading contagious diseases is as follows: Scarlet fever, 59 to 16; typhus, 79 to 38; diphtheria, 59 to 14; enteric fever, 311 to 238; erysipelas, 172 to 136. With some different diseases the numbers are as follows: Malarial fevers, 46 to 11; alcoholism, 178 to 130; gout, 91 to 78; rheumatic affections, 251 to 215; diseases of the nervous system, 4,565 to 2,934; liver diseases, 1,744 to 744; other diseases of the digestive system, 973 to 632. On the other hand, medical men enjoy an advantage in diseases of the respiratory organs.

Thus we see that life insurance is more needed by the families of physicians than by those of other classes of like social standing and earnings, while there is no discrimination against them as a class. Another consideration of some value is the fact that medical men enjoy a peculiar advantage in respect to payment of premiums, through fees for the examination of other candidates. With a large fraction of physicians these go far in securing a good amount of insurance, and for a few there is a considerable surplus. A policy-holder is regarded as a member of the family, and entitled to due consideration in the matter of patronage according to general business usage.

As to style of policy for medical men, the same general rules apply as in other callings. For a man with a family the ordinary life plan is most desirable. In a mutual company dividends can be applied to payment of premiums or to increase of policy, according to choice or circumstances of the insured. Medical men, like others, may be under the necessity of taking some kind of term policy, by reason of age, family history, or apparent diathesis. There is no necessity here to go into particulars on this point. The important considerations are thus epitomized:

1. Medical men are less apt than other professional men to gather wealth to themselves.
2. Their expectation of life is less, and their liability to leave their families in straitened or distressed situation much greater, unless such provision as life insurance be resorted to.
3. There is actually no discrimination against medical practitioners, as is the case with those following a number of other callings.
4. Opportunities for easy payment are presented to most medical policy-holders, which in effect amount to favorable discrimination, though one of which others have no right to complain.

THE NEED FOR IMPROVEMENT IN THE EXAMINATION OF PERSONS CHARGED WITH BEING INSANE.

We have already alluded to the necessity for greater care in the examination of persons charged with being insane, and of the uselessness of many of the commitment papers reaching the asylums. These commitment blanks are intended to furnish such data as will enable intelligent treatment to be initiated and carried out, as well as to insure due precaution being taken for the safety of the patient. In many cases the replies to the questions are worthless, and in quite a number of instances no attempt whatever is made to answer the queries.

We have before us copies of commitments relating to two persons, whom we shall call A and B, sent to the asylums from San Francisco during the month of May of the present year. In the case of A, the medical examination shows the name, age, nativity, residence, social condition and occupation of the patient, as well as the number of children. In reply to query "14, state why you consider patient insane, etc.," the answer is: "Cannot be controlled, gets out of bed and wanders around, hallucinations of sight;" the patient is also described as "destructive," and in reply to query "22, any bodily disorder or dis-

Now comes another consideration, quite well recognized by life-insurance men, but we think mostly unheeded by physicians themselves: they are not as good risks, in insurance parlance, as other educated men. The researches of MR. OGLE, presented to a recent Congress of Hygiene and Demography, showed that, between the ages of 25 and 65, the mortality among clergymen ranked lowest of all the occupations. Taking this as a standard, with 100 as a number for comparison, lawyers show 152 and physicians 202. Other leading avocations give the following figures: Farmers, 114; grocers, 139; fishermen, 143; merchants, 155; tradesmen, 158; bakers, 172; smiths, 175; laborers, 185; tailors, 189: printers, 193; clerks, 199; quarrymen, 202; butchers, 211; plumbers and painters, 216; omnibus drivers, 267; miners, 331. DR. FARR, the celebrated English Register-General, remarks. "Physicians and surgeons, from youth up to the age of 45, experience a mortality much above the average; after that age they do not approach the priesthood in health, but differ little from the average."

At the outset most practitioners have a hard struggle for a living, and age fast from worry. As business grows, night-work makes the burden particularly heavy. A country practice is made laborious by long rides, and rough by exposure to inclement weather. At all times the medical man must face the dangers of contagious disease. Thus DR. OGLE finds that the relative deaths of physicians to those of the population at large from the leading contagious diseases is as follows: Scarlet fever, 59 to 16; typhus, 79 to 38; diphtheria, 59 to 14; enteric fever, 311 to 238; erysipelas, 172 to 136. With some different diseases the numbers are as follows: Malarial fevers, 46 to 11; alcoholism, 178 to 130; gout, 91 to 78; rheumatic affections, 251 to 215; diseases of the nervous system, 4,565 to 2,934; liver diseases, 1,744 to 744; other diseases of the digestive system, 973 to 632. On the other hand, medical men enjoy an advantage in diseases of the respiratory organs.

Thus we see that life insurance is more needed by the families of physicians than by those of other classes of like social standing and earnings, while there is no discrimination against them as a class. Another consideration of some value is the fact that medical men enjoy a peculiar advantage in respect to payment of premiums, through fees for the examination of other candidates. With a large fraction of physicians these go far in securing a good amount of insurance, and for a few there is a considerable surplus. A policy-holder is regarded as a member of the family, and entitled to due consideration in the matter of patronage according to general business usage.

As to style of policy for medical men, the same general rules apply as in other callings. For a man with a family the ordinary life plan is most desirable. In a mutual company dividends can be applied to payment of premiums or to increase of policy, according to choice or circumstances of the insured. Medical men, like others, may be under the necessity of taking some kind of term policy, by reason of age, family history, or apparent diathesis. There is no necessity here to go into particulars on this point. The important considerations are thus epitomized:

1. Medical men are less apt than other professional men to gather wealth to themselves.
2. Their expectation of life is less, and their liability to leave their families in straitened or distressed situation much greater, unless such provision as life insurance be resorted to.
3. There is actually no discrimination against medical practitioners, as is the case with those following a number of other callings.
4. Opportunities for easy payment are presented to most medical policy-holders, which in effect amount to favorable discrimination, though one of which others have no right to complain.

THE NEED FOR IMPROVEMENT IN THE EXAMINATION OF PERSONS CHARGED WITH BEING INSANE.

We have already alluded to the necessity for greater care in the examination of persons charged with being insane, and of the uselessness of many of the commitment papers reaching the asylums. These commitment blanks are intended to furnish such data as will enable intelligent treatment to be initiated and carried out, as well as to insure due precaution being taken for the safety of the patient. In many cases the replies to the questions are worthless, and in quite a number of instances no attempt whatever is made to answer the queries.

We have before us copies of commitments relating to two persons, whom we shall call A and B, sent to the asylums from San Francisco during the month of May of the present year. In the case of A, the medical examination shows the name, age, nativity, residence, social condition and occupation of the patient, as well as the number of children. In reply to query "14, state why you consider patient insane, etc.," the answer is: "Cannot be controlled, gets out of bed and wanders around, hallucinations of sight;" the patient is also described as "destructive," and in reply to query "22, any bodily disorder or disease," the answer is: "Hysterical spasms, uterine disease." Thus out of 27 questions, replies, as above, are given to 10 and the remaining 17 are in a condition of primitive blankness. In the case of B, the result is even less instructive. The first 6 queries, relating to name, age, etc., are answered. In reply to query "12, date and duration of previous attacks," the rather vague statement "2 weeks" is made. The answer to question "14, state why you consider patient insane, etc.," is: "Cannot be restrained, runs around the wards, memory lost, does not remember how long he has been in hospital, etc." There is nothing further to elucidate matters, or in other words, out of 27 questions replies to 8 only are given, the remaining 19 being untouched. It happens that both of these patients were inmates of hospitals in San Francisco when committed, and it is therefore difficult to believe that the foregoing comprises all an intelligent examining board could elicit on the subject.

We understand that this fairly represents the usual style of commitment, and it certainly presents an urgent demand for reform. Such examinations are a farce, and would much better be conducted without the intervention of physicians, if this result is all that professional skill can accomplish. We fully realize that the examination of the insane is an exceedingly difficult matter, demanding a high degree of professional skill and attainment. Many obscure cases can only be diagnosed by the experienced alienist, who is not often at hand. The examining physicians in these, as well as in all doubtful cases, have but two alternatives: To send the unfortunate to an asylum, thus branding him for life with a most unpleasant stigma, or to discharge him with the apprehension that a brief period may demonstrate his irresponsibility through some insane explosion.

The remedy for all these doubtful cases is the provision at the various county hospitals of a ward in which the suspect might be detained under observation for a reasonable time. The expense of this innovation would be comparatively small and quite out of proportion to the great advantages conferred upon suffering and unfortunate humanity. We do not assert that this step would effectually dispose of all obscure cases, but it would certainly materially reduce the number of those committed to asylums through absence of other accommodation. The Superior Judge should be empowered to commit the person examined to the hospital with the same authority as now obtains in the case of the State asylums.

NOTES.

An Unfortunate Accident to Dr. J. J. Meigs.

On the 26th of April, Dr. J. J. Meigs, of Elko, the leading surgeon of Eastern Nevada, met with a most unfortunate accident. While amputating the gangrenous extremity of a tramp, who had been injured by the cars while "stealing a ride," he pricked both index fingers with a needle. Later in the day the fingers became quite painful, and at midnight he had a severe rigor. There being no medical aid at hand, and fully realizing the gravity of the case, the Doctor started for California on the morning of the 27th. At Reno, 36 hours after the original inoculation, he was met by a surgeon, who discovered that the distal portions of each index finger were already gangrenous. Both fingers and hands were at once freely laid open, and he was taken to Sacramento for further treatment. The history of the case for the following week was that of a struggle for existence. The palmar and dorsal surfaces of both hands, and the left forearm and arm, became involved in a rapidly progressive cellulitis, phlegmonous in type. There were also evidences of profound systemic poisoning. Under heroic surgical treatment, free stimulation, and careful nursing, there was gradual improvement. At the proper time the affected fingers were amputated at the middle joint, and the Doctor's many friends throughout the coast will be pleased to learn that his life has been spared for further usefulness.

Galvanic Action Between Different Metals in Dental Fillings.

Dr. Geo. W. Whitefield discusses the pathological conditions produced by galvanic action between dental fillings, in the *Journal of the American Medical Association.* He has demonstrated that a current is produced, sufficient to deflect the needle of a galvanometer, when gold and amalgam fillings have been placed in water, even when insulated from each other; the amalgam forming the positive and the gold the negative element. Conduction through the fluids of the mouth, containing, as they do, chloride of sodium in considerable proportions, will be much more energetic than when plain water is used. The practical result of this galvanic action is, that when gold and amalgam are placed in the same tooth this action goes on until the baser metals on the surface of the amalgam filling are destroyed, and the filling is practically raised to a negative metal by exposing the gold, silver or platinum. Meanwhile electrolytic action has been going on around the gold filling causing destruction of the tooth and gradual loosening of the filling. This, he believes, explains the clinical fact that when gold and amalgam fillings are inserted in the same mouth, the gold fillings loosen and drop out whilst the amalgam remain. Dr. Whitefield suggests that where teeth are too sensitive or too soft for gold they should be filled with cement or gutta percha for one or two years, if necessary, when, often, their condition will have so far improved that gold can be used. If, however, for any reason, amalgam must be employed, that kind should be chosen which, by oxidizing rapidly, will put a stop to the chemical action. Quite probably many of the annoyances and discomforts in connection with teeth that have been filled can be ascribed to this source. It will be well for physicians to bear this fact in mind when dealing with conditions of the dental nerves that are not readily explicable from other causes.

SPECIAL ARTICLE.

THE REFLEX CLUB.[1]

At the last annual meeting of the Reflex Club, as we are informed by the good-natured scoffer, Mr. E. B. Sangree, there was presented the case of a woman 30 years of age, wife of a mechanic, and mother of three healthy children; she was well proportioned and apparently sound, both physically and mentally. At irregular intervals she suffered from headache, for which she had been treated without success by a member of the Club, who, therefore, presented her for diagnosis and suitable therapeutic treatment. Although a unanimous opinion was not reached, still all agreed, viz., that it was a case of reflex neurosis. The discussion, however, threatening to become personal, the President proposed that the patient be treated by each physician in turn, until her suffering be relieved, and thus allow the result to decide.

The first physician selected was the well-known gynecologist, Prof. Fallopius. He maintained that the headache could be attributed only to reflex action, proceeding from disease of the uterus or of the ovaries; he had seen the same trouble in numerous other cases. Careful bi-manual examination revealed no abnormalities; the menses and action of the bowels were normal, and, as he informed the assembly, even an experimental laparotomy revealed to his experienced eye no disease. Nevertheless, he held it advisable to remove the ovaries and tubes in order to free the patient in the future from danger of ovarian cysts or pyosalpinx. The operation offered no difficulties. The headache remained as before.

The second physician, Dr. Strabismus, soon recognized a neuralgia of the fifth pair of nerves, proceeding from disease of the eye; it could only be alleviated by tenotomy. The rectus externus and the rectus superior were brought forward and held by a stitch; the internus and the inferior were correspondently drawn backward and similarly fixed; the operation was performed on both eyes in the same manner and to the same extent. Although the operator pointed out that the change of the visual axes lent to the woman an air of shyness and modesty, yet some declared that the squinting upward and outward disfigured her. The headache remained as before.

The third physician, Dr. Caustic, wholly agreed with his predecessor in diagnosing a reflex irritation of the fifth pair, but he made disease of the nose his point of departure. He had had patients enough in whom the nose showed still fewer abnormalities than in this one, and whom he had treated with magnificent results. After removing with the galvanic cautery several small polypi of the size of half a pea from the roof of the left nostril, he cauterized with the same instrument a slight hypertrophy of the middle right turbinated bone. As the septum deviated from a straight line slightly to the left, he perforated it in three places and then by graduated bougies forced it into proper position. With his uvulatome, the excellence of which instrument he took this opportunity to demonstrate to his colleagues present, he also amputated the apex of the uvula. But as, in spite of all this, the pain in the head did not decrease, Dr. Caustic declared the cause to be some disturbance in the sinus frontalis or sphenoidalis, too deep to be reached with his instruments.

---

[1] Translated for THE MEDICAL TIMES from the Deutsche Medicinal Zeitung by Mrs. L. C. Lane.

In the meantime, the patient had become so shy of the knife that she declared, had she known beforehand all she was to undergo, no one should have touched her, and it was only by great effort that the orthopedist, Dr. Pedibus, persuaded her to submit to his treatment. After this doctor had found the right foot to be a millimetre shorter than the other, and had, therefore, ordered a corresponding extra thickness of sole on the right shoe, he also discovered that a stronger pressure against the knee when bent at a right angle caused a slight pain in the corresponding hip joint. This led him to believe that the whole trouble was the result of a commencing coxitis, and he applied to the patient five moxa-points as derivatives. But he was finally obliged to dismiss the patient uncured, because she absolutely refused to submit to a proposed resection of the hip joint.

Dr. Rectus had prophesied this result. In his opinion, there was no doubt that the underlying cause of the whole trouble was disease of certain folds of the mucous lining of the rectum. The unfortunate patient allowed herself to be persuaded to once more submit to an operation. Dr. Rectus narcotised her, dilated the sphincter, introduced a speculum and cauterized the diseased mucous membrane as far as the muscular coat. But, alas, the sphincter lost its elasticity, and the patient, in addition to her headache, now suffered from incontinentia alvi. Of course, in the meantime, efforts were made conjointly in the private clinics of all these gentlemen to keep the sufferer in the most favorable condition.

It is now said that the patient became so angered at the last unhappy result that she refuses, out and out, to submit herself again to treatment by any member of a Club, and this is the more to be regretted, as Dr. Caninus declares, with certainty, that the pain in the head could be relieved immediately if the woman would only consent to the extraction of two molars on each side.

[While correcting the proof of the foregoing we received by cable—for of course such things do not happen among us—the news, which we repeat with all reserve, that the woman finally went to an all-around doctor—our voucher even said something about a doctor in a small country town—who prescribed an antipyrin powder which gave her immediate relief and permanent cure. We are now awaiting confirmation of this quite incredible report.]

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting April 19, 1892.

The President, G. L. SIMMONS, M. D., in the Chair.

New Member.—DAVID SHOEMAKER, M. D., was duly elected a member of the Society.

DR. F. B. SUTLIFF read a paper, in which he referred to the progress of the Society and its work. He believed that the rule of entertainment in rotation was correct and should be complied with strictly, but he favored a more modest supper than at present obtained, with, as a substitute, a more elaborate entertainment at the annual meeting. He thought that members should not be compelled to prepare papers, but that this should be left to individual inclination and opportunity.

After considerable discussion, in which the concensus of opinion was that the present rules, which had been most conducive to the Society's welfare, should be more strictly enforced, a resolution was adopted providing that each member should be notified two months in advance, that he must announce the title of his paper at the meeting preceding that at which it will be read.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, April 12, 1892.

The President, D. W. MONTGOMERY, M. D., in the Chair.

Entertainment of the State Society.—DR. M. REGENSBERGER, Chairman of the Committee on Entertainment of the State Society, reported that the necessary preliminary steps had been taken and a programme had been arranged. Subscriptions, however, were coming in very slowly, and he thought that the Society might be called upon to make up a deficit. The committee was authorized to proceed with its work.

Injury to the Elbow, with Subsequent Peculiar Deformity.—DR. H. M. SHERMAN reported the case of a boy who had received an injury to the elbow, probably a fracture of the external condyle, some months ago. The elbow was left in an almost rigid condition, flexed about 45°. The hand and arm present the following curious features: The whole skin of the lower half of the forearm and hand is thick, soft, velvety and congested; the wrist is habitually held flexed about 50°; the first phalanges are hyper-extended on the metacarpus, and the second and third phalanges slightly flexed on the first and second, respectively. Efforts at flexion flex the wrist, increase the hyper-extension of the first phalanges, and flex the second and third phalanges. Efforts at extension do not affect the wrist, and merely extend the second and third phalanges. Abduction and adduction of the fingers are possible to a limited extent. The hand can be put in the normal position, but only by considerable force. Sensation is in no way affected. He asked for a diagnosis.

DR. J. MCMAHON said that a year ago he had a similar case; the patient had slipped and fallen, sustaining a fracture through the olecranon. Under chloroform the attachments were broken up. By manipulation and the lifting of weights (increased gradually) the deformity has disappeared. In this case, he believed the musculo-spiral nerve was bound down and should be liberated. The nerve should be cut down upon, and rotation and flexion practised every day. Massage would be beneficial.

DR. L. BAZET had been called by Dr. LeTourneux about two months ago in a similar case. There was undoubtedly infiltration, and he should advocate cutting down and making extension, when absorption might take place.

DR. B. F. CLARK did not think this case similar to the one referred to by Dr. McMahon, as this was a case of paralysis.

DR. SHERMAN, in replying, said the case had been shown, hoping that he might obtain some assistance as to a diagnosis, but thus far he did not see that he had gained any information. He did not consider the anchylosis of so much importance. There was not complete paralysis of any single nerve. The trouble may be in the vasomotor nerves.

Cocaine.—In introducing this subject for discussion, DR. L. BAZET said he had found that the injection of 2 to 5 gr. for local anesthesia in operations, often produced very serious effects. His last experience was to-day, while operating for in-growing nail. Great precaution was taken that no blood vessels should be injured, and the amount was only 1 gr. He had just finished the operation when the man began to chill, and became pale, breathing labored; in fact he seemed about to die, but by stimulating with ether and whiskey and the use of hot water, he was restored.

DR. P. H. BAILHACHE had made use of cocaine at the Marine Hospital, with very satisfactory results. A 4 per cent. solution is usually employed, and no bad effects have ever been seen.

Dr. A. Barkan used a 3 to 4 per cent. solution, and had never seen any bad effects; but the dose was very small. In nasal surgery the parts are brushed slowly, at intervals of 10 minutes, three or four times, when pieces of bone are removed without any discomfort to the patient. In the vault of the pharynx it is not very satisfactory, the application being painful. The great improvement in cataract and other operations upon the eye, is due to the use of cocaine, as there is perfect freedom from pain. No haste is necessary, and the troubles and interruptions formerly met with in the use of ether are avoided.

Dr. K. Pischl agreed with Dr. Barkan, and felt that we should be very grateful for the discovery of cocaine. He had seen one case of poisoning from the drug, from two drops of a 4 per cent. solution in the eye. In glaucoma the conjunctiva will not become anesthetic, even with a 10 per cent. solution.

Dr. M. Krotoszyner injected 1 gr. into a young man, about 20 years of age. Symptoms of intoxication supervened, and he thought the patient would surely die. As he could obtain no other stimulants, was compelled to depend upon strong coffee. One week later he used ½ gr. in the same case, and met with the same results. He thought there was some idiosyncrasy as to its toleration, as he had recently seen two cases. In urethral surgery, it is useful.

Dr. C. C. Vanderbeck had made a thorough trial as to the usefulness of cocaine in the cure of the opium habit, but has derived no benefit from it.

Dr. G. W. Daywalt thought that in the nose, the stronger solutions, 10 to 15 per cent., were safer than the weaker.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Elections at the Institut.—The Age Limit at Examinations for Internes.—The Quarantine Congress.—Prof. Agrégés, of the Paris and Provincial Faculties.

The three principal subjects of interest in the scientific and medical world are the elections at the *Institut*, the "age limit" at the competitive examination of the internes, and the quarantine question. The first causes the most excitement, but only among those immediately concerned. The question of the age limit for the examinations has greatly stirred up the medical students' world. The *chefs de service* (hospital physicians and surgeons) take part in it, and espouse the cause of the internes. The medical and daily press also takes sides with them. Politeness to the big wigs obliges me to write about them before I discuss the affairs of the small fry, otherwise medical students.

The general importance of this question is far greater than that interesting the big wigs, as it involves the medical merit of the future generation of physicians and surgeons, consequently the public health of future generations. Whereas, whether it be Prof. Guyon or Prof. Lannelongue who shall be elected to fill the vacancy in the surgical section of the *Académie des Sciences*, caused by the death of Prof. Richot, is principally interesting to those honorable gentlemen. Both have a modicum of claim, and neither will add *éclat* to the academy, like in the case of M. Pasteur, M. Renan and Claude Bernard, whose position and prestige were independent of being numbered as a member of the *Institut* (the title of all the French Academies in the aggregate) it is they, and the few like them, who *give* prestige to it. In these elections there are many factors besides actual merit: power and tact go a great way; tact is a many sided influence acting in various ways. Both of the candidates have the reputation of being able tacticians; friends of the one side say their antagonist is the most wily, and the same is said on the other side. If the election depended purely and simply on the claim due to a distinguished surgical career, M. Guyon would be a formidable adversary. M. Lannelongue has brilliant talent, but, owing to the possession of a handsome fortune, has not cultivated private practice; his hospital patients, intimate friends, the poor and needy, he meets with, reap the advantage of his undoubted abilities. Some of his spare time has been devoted to scientific experiments; these, though honorable for a practising surgeon, are not, according to the opinions of many, of a character justifying a seat in the *Institut*. Others consider the mere fact of having undertaken scientific research gives M. Lannelongue a claim incontestibly superior to that of M. Guyon. A short time ago M. Lannelongue communicated to the *Acadèmie des Sciences* a paper on his treatment of tuberculous lesions requiring surgical treatment—articular bony lesions. The treatment consists of injecting zinc chloride into the tissue surrounding the lesion. He offers this treatment as a specific against surgical tuberculosis. There is one certain fact, that the tissue into which the injection is made becomes sclerosed; whether this prevents the disease from spreading, is not yet demonstrated. Many surgeons have adopted this method, and are not so pronounced as to the curative results as M. Lannelongue. Craniectomy, as practised by M. Lannelongue, to improve the condition of idiot children, has in some cases succeeded in a moderate degree. In a few months the elections will come off, and I will inform you of the result, and also of that in the zoölogical section, caused by the death of M. Quatrefages. Here the candidates are M. Vaillant, M. Périer, professors at the museum of natural history, zoölogy, botany, mineralogy and geology. M. Dareste, of the Sorbonne, who studies abnormal embryology, is also a candidate, and the most distinguished.

The new regulation of "the age limit" obliges medical students to pass the competitive examination for the post of interne before reaching 26 years of age. This regulation has been framed by M. Peyron, Director of the Public Assistance, and Prof. Brouardel, Dean of the Paris Medical Faculty. It was deemed necessary by these two authorities, because the new military law obliges all men of 26 years of age, who are neither internes nor doctors, to finish their military service, which means to break off their studies during five years, having already given one year to military service. This interval between the medical studies gives an unfair advantage to those who are exempt from it owing to bodily infirmity, sex or nationality; not only the students have their studies uninterrupted, but they can compete more often. Nevertheless, the arrangement is considered as a hardship and a hindrance rather than an advantage, and a well organized opposition is at work. The daily and medical press, hospital surgeons and physicians espouse the cause of the students. The first concession made is that the new regulation is not to be observed until the new military law is in force. Doubtless before that time arrives the whole question will be reconsidered and remodeled.

The Quarantine Congress has ended satisfactorily. France was inclined to be pettish, but has found means to content England and herself.

The last competitive examinations of prof. *agrêgés* for the Paris and provincial medical faculties shows that doctors can decidedly disagree, and even quarrel. It is evident that many of the candidates who are elected are not the most able, and some of those who are left out in the cold are undeniably *savants* distinguished. A parody on the lines on flies in amber is suggested on reading the list of the names of the new professor, *agrêgés*:

> They are neither wise nor rare,
> The wonder is that they are there.

M. Germain Sèe in his journal, *La Médicine Moderne*, explains the wonder. He says: "Owing to disputes among different *chefs d'école*," which, translated, means professors with hobbies, "the names of some of the candidates which rightly should be among the successful are among the unsuccessful," and further declares the competitive examination for *agrêgés* must either be abolished or seriously modified. The truth of this view has been felt for some time. The *concours* are now no guarantee that the best man has the best place. They only furnish opportunities for intrigue and bargaining. Prof. So-and-so votes for the pupil and protege of Prof. So-and-so, if he in his turn votes for Mons. X or B at the *Bureau Central Concours* or the *Internes Concours*. The former is for hospital surgeons and physicians, the latter for house surgeons. If the Professor bears a grudge against another, the pupil of the said Professor is sure to bear the brunt of it at the next *concours* he is engaged in. This is the explanation that the *savant* and specially able pupil of M. Charcot, M. Babinsky, who is considered to be a future Charcot in talent, has not been elected. Disputes and animosity among the professors acting as judges has resulted in nominating candidates that astonish even those "who know how these things are done." It is rumored that the decision will be protested against and annulled. This is to be hoped for, especially if a fresh *concours* brings justice to the fore. At present there are no marks given. When all the verbal and written examinations are over, the judges vote. This system evidently favors injustice, conspiracies and intrigue.

Paris, May 2, 1892.

LONDON.

[FROM OUR OWN CORRESPONDENT.]

The Debate on Immunity at the Pathological Society.—Vaccination and Small-pox.—Resignation of Dr. George Buchanan.—Registration of Nurses.—The Gresham University.—Mr. Lawson Tait on His Defense.—Death of Sir William Bowman.

The discussion on phagocytosis and immunity, which occupied the whole of the time of three meetings of the Pathological Society, has been the chief event of the kind during the winter session in London. The debate, which was mainly sustained by the younger school of pathologists, was of a very serious and solid kind, and has been of use in that it has forced the attention of the older school to the subject. Such topics have been curiously neglected and underrated until lately, and even now nearly all the workers in London have been trained in Edinburgh, Cambridge, or Paris. The Pathological Society has been the main outlet for pathological work in London, and that has been interpreted to mean the examination of morbid specimens from the *post-mortem* room. The attempt to discuss pathology proper was frowned upon, and many papers dealing with the processes of diseases have been ruled out of order. It would appear that this extraordinary policy has now been abandoned, but not before it had nearly brought about the ruin of the Society. The discussion, as has been said, was prolonged and elaborate; the attempt to limit the time taken by the speakers had to be abandoned, and the large attendance showed that there was a real interest in the matter, so that the room presented a curious and instructive contrast to the scanty, languid audience usually seen. Let us hope that Dr. Dryasdust will in future be kept in his proper sphere, and not permitted entirely to usurp the name of pathologist. The debate was remarkable also for the manner in which Metschnikoff's researches and theories withstood the assaults made upon them. That is to say, the primary importance of the cell in the production not only of recovery, but also of immunity, was very plainly shown. Whatever the importance of the functions of the fluids of the body in the work of resisting and destroying the invading microbe, it must be clear that they derive this property from the cells by which they are elaborated, and that the change produced by a previous attack of a disease in protected individual must be a change in the activity of certain cells, or of the cells as a whole. As to the nature of this change it seems that absolutely nothing is known, that in fact we can only know of it from its effects. It may be compared to memory, in relation to the organism generally, and may, therefore, be admitted to be in a certain sense an inherited function in the individual cell.

A Royal Commission on vaccination has been taking evidence for several years, and will, in all probability, continue so to do for several years more. The fact that the Commission has been sitting has been used as an excuse by the anti-vaccinationists for evading and defying the law as to compulsory vaccination; in particular it has been an excuse for weak-kneed local authorities to decline to put the act in force. The anti-vaccinationists are well organized, and if a parent is condemned to a fine for not having his children vaccinated they either pay his fine or, if the circumstances of the locality appear to them to favor such a policy, he is made a martyr and an execution is put into his house, or he gets himself sent to prison for contempt of court. It is now stated that the Commission will shortly issue an interim report, and that this report will consist mainly of a recommendation that cumulative penalties should no longer be inflicted. The effect of this remains to be seen, but it will go very near to abrogating the compulsory clauses of the vaccination act, since any parent who objects to vaccination will know that he has nothing worse to fear than a single fine. That there has been in many districts a relaxation in the vigilance with which the law used to be enforced is not disputed, and it is also the fact that we are threatened in several districts with more serious epidemics than have been known for years. Whether there is any connection between these two circumstances is the question in dispute; to assert the affirmative is to bring on oneself all the foul abuse in which the anti-vaccination press indulges. From this a great many doctors shrink.

The resignation of Dr. George Buchanan, Principal Medical Officer of the Local Government Board, is felt as a distinct loss of power by every one who is engaged in the great struggle against disease and unreason. He was, in some aspects, an ideal head of that department, as he was a man not only of wide experience in that special line of sanitary work, but possessed of a keen sympathy with scientific work and of a real knowledge of the direction in which advance must be made in the near future. He has never degenerated into the mere official. The most important investigations of general interest which have been carried out during his tenure of office, have had to do with the cause of the increased prevalence of diphtheria in towns, and with the relation of this disease and of scarlet fever to disease in animals. His successor will be Dr. Thorne-Thorne, who has been for some years the assistant medical officer. Dr. Buchanan is to receive the honor of knighthood.

A scheme is on foot to give a charter of incorporation to the British Nurses' Association; this body keeps a register of nurses. It has a Council, which is apparently self-elected, and the admission of nurses to the register is controlled by this Council. This scheme is strongly opposed by certain of the best known nursing institutions, mainly on the ground that the grant of a charter would give to the register a national character which it ought not to have, unless it is made really representative of all the great nursing interests. This the Council is not at present. To many it seems not improbable that the registered nurse of the future may become a kind of inferior order of (irregular) practitioner of medicine. It should be added that the Nurses' Pension Fund, to which Mr. Morgan, of the firm of Morgan, Drexel & Co., was one of the largest donors, is a distinct institution, and that the rivalry between the two is keen and very far from advantageous to the best interests of the nurses.

The Gresham University, the new university for London, has met with a severe check, has not in fact been allowed to come into existence. It may be remembered that as the result of many years of negotiation a scheme was got into form by which a university would have been formed by a coalition of the chief teaching colleges in London, including the medical schools. A short time ago the adhesion of Gresham College, an old city trust founded by Sir Thomas Gresham, in the reign of Elizabeth, was arranged, and the new name given to the proposed university. The charter was duly drawn and passed by the Privy Council. When laid upon the table of the House of Commons, however, it encountered so much opposition, and from so many quarters, that it had to be withdrawn. A new Royal Commission is about to be appointed, and the question is thus shelved for another year or two.

Mr. Lawson Tait has been the defendant in an action for libel. A lady suffering from fibroid tumor of the uterus was under the care of Dr. Denholm, of Manchester, who, after consultation, recommended a trial of Apostoli's treatment by the electric current. The treatment it would appear did not do any good, and during its progress a fistula was produced. Two operations were performed for the cure of this fistula, but without success. The patient subsequently consulted Mr. Tait who recommended an operation for extirpation, and appears to have spoken in a very sanguine manner of the result. The patient was accordingly submitted to operation by him, and died within 48 hours. Her husband, who had barely time to reach her bedside, asked Mr. Tait for an explanation, and the surgeon replied in a letter, which seems to have been far from judicious. He wrote: "The immediate cause of the unfortunate result is the rupture of a blood-vessel at or near the spot where the electrical needles caused so much damaging inflammation and sloughing. Had she never been submitted to that treatment the case would have been a straight-forward one, and her recovery almost certain." On receipt of this letter, the husband had an interview with Dr. Denholm, who disputed the statements in the letter, and said that the only way to ascertain what was the cause of death was to make a *post-mortem* examination. A partial examination was made under some disadvantages, as the body was not removed from the coffin. The result was to show, in the opinion of the three gentlemen who made it, that death was due to peritonitis. It was upon this that legal action was taken. The trial was stopped. Mr. Tait stated that he had no intention of making any reflection upon the character of any of the lady's earlier medical attendants, while Dr. Denholm withdrew the imputation that Mr. Tait had wilfully or recklessly misstated the cause of death. Whether we have heard the last of this case is not quite certain. There seems to be some trouble as to costs, and the three gentlemen who made the *post-mortem* have written a letter adhering to their statement that death was due to peritonitis. They state that the hematocele, to which Mr. Tait was understood to refer in speaking of hemorrhage as the cause of death, was no bigger than a large filbert.

The death of Sir William Bowman has removed the father of English ophthalmology, and a man who in his earlier days was one of the most brilliant and original workers in the then new field of minute anatomy, which he never allowed to be for a moment divorced from physiology. The modern division, already hinted at in this letter into students of structure and students of function—a division which is largely responsible for the barrenness of much modern work—found no supporter in him. He was strongly urged at an early age to devote his great talents and manual dexterity to the branch of surgery, then in its infancy, with which his name was subsequently identified. He was a most successful ophthalmic surgeon, and for many years was the acknowledged leader in England. He was a friend of Graefe and Donders, and the former was a great admirer of Bowman. More than once in welcoming English students to his clinic, he has expressed his opinion that they had no need to leave England for the best teaching and example in ophthalmology so long as Bowman lived. Bowman enjoyed a large income from his profession for a good many years, but for the last ten has been practically retired, spending much of his time at his country house near Dorking, where he cultivated orchids. He was, however, a constant visitor at the meetings of the London scientific societies, and had attended the Royal Society only a few weeks before his death from pneumonia. He was the first President of the Ophthalmological Society when it was organized in 1880, and his memory will be perpetuated by the Bowman lecture delivered annually before it. He was a great favorite with everybody who knew him, and his clean-cut, intellectual features, and genial smile were sure passports with young and old.

LONDON, April 11, 1892.

LONDON.

The Sloane Maternity.—The Sanitary Aspect of Narrow Streets.—Drinking Water in Europe.—Public Urinals.—The Physician a Gregarious Animal.—The Hospitals of London.—Operative Surgery.—Physiological and Pathological Museums.—Hospitals for Children.—The Obstetrical Society of London.—Cæsarean Section versus Craniotomy.—The Ethical Questions Involved.—Medical Society Buildings.

I have hesitated to write you heretofore because I had no time for a carefully digested article; but perhaps a hasty sketch of some of the things that have interested me may not be devoid of interest to your readers. A few weeks of the earlier part of my trip were well spent in New York in visiting the colleges, hospitals, post-graduate and polyclinic schools and clinics, and in witnessing operations; but of all things interesting in New York that which pleased me most was the Sloane Maternity. This is a handsome brick building with cement floors, marble bases five feet high around the rooms, excellent heating apparatus, and every known means for the most perfect cleanliness and care, as fully described in a recent number of the *American Journal of Obstetrics*. So thoroughly is the comfort and safety of the parturient provided for in this institution that, if some of the American wives were induced to visit it, I think they might forego their successful objections to child-bearing and consent to become mothers, for the sake of having a home therein for a few weeks! Among the many vastly wealthy in San Francisco it is surprising that there is not one who seems willing to send his name down to posterity as having endowed so excellent an institution.

Instead of going to London direct from New York I took the Mediterranean route, which gave me the opportunity of a couple of weeks in Italy. The first European town visited was Gibraltar, whose short, extraordinarily narrow and crooked streets have no counterpart in the United States. These characteristics of the streets are reproduced with more or less exactitude in all the Italian cities, and even in London. But in Rome, in Milan—the most modern city in Italy—and, to some extent, in London the march of improvement has swept many of them away. In Gibraltar, Venice, and Genoa they still remain. The buildings of the latter city are uniformly high, scarce any being less than five or six stories, and many of them eight and nine. Very many of the streets are not more than ten. eight, and even six feet wide, so that it is almost possible to climb from the window of one house into that of its neighbor opposite. I mention this matter because of the influence that such close proximity of tall houses must have upon the health of their inhabitants. The amount of direct sunlight that reaches most of the rooms of these houses must be infinitessimal; and one imagines that he might almost *taste* the bad air in them on some hot summer days. The mortality in these cities might be lessened, no doubt, were the objectionable features remedied. That of Gibraltar is rather high, yet considerably less than is found in contiguous Spanish cities, no doubt from the advanced sanitary care given by its English rulers.

There has been such a hue and cry about the drinking water of Europe, and the necessity of drinking wine instead, that I have found it of some interest to inquire and examine into the subject. Without a scientific investigation of the matter, which time would not permit, I cannot avoid the conclusion that it is largely a case of great cry and little wool. It cannot be denied that some cities, such as Paris and Berlin, have much poor water. The former city is, unfortunately, in part supplied from the Seine. In two or three years, however, it will have an abundance of the best of water, brought from a distance of 83 miles. But can any objection be made to the waters of Rome, which for centuries have been brought from the Sabine hills and the Alban mountains? It was my good fortune to be housed in the latter city at a pension kept and patronized by Americans. Of the 80 persons who sat down to dinner, not more than half a dozen drank wine. As regards the taste and appearance of the water, it has been uniformly excellent everywhere; a little warm sometimes, for they are afraid of ice over here, but in all other sensible characteristics entirely satisfactory. I am quite aware that appearances are not the proper means of judging of the salubrity of waters, but we are certainly not justified, judging by the mortality, in concluding that the waters of the cities of Italy are so markedly deleterious. If the lower animals have the capacity of neutralizing or digesting some of the presumed deleterious ingredients of water, let us hope that the wise Creator has endowed man with a similar function.

There is one system prevalent in this part of the world which the cities of the United States might adopt to great advantage. This is the system of public urinals; not, perhaps, as existing in Italy, where selfish man provides only for himself, and in rather too public a fashion, but as adopted in London. In all parts of Italy one finds in public places and thoroughfares—possibly not upon the most frequented streets—a couple of slabs of marble projecting a foot and a half from a wall, between which a man may stand with his back to the crowd—there is no other concealment—and urinate. It is the commonest circumstance for a man to leave his companion of the opposite sex, for a brief period, and even to converse with her, while he is attending to his function. This custom, doubtless, shows the influence of habit. and is presumably a relic of ancient times, when sexual matters were more openly discussed, and women were given no great consideration in such matters, or, indeed, in any others. This is well exhibited, also, in the frescoes in the houses of ancient Rome, and in Pompeii. In one of the public rooms of the house of Livia, on the Palatine hill, among other frescoes is one representing two women, who were probably sterile, making offerings to the god Priapus, who is represented in anything but a manner that would be tolerated at the present day; and in the streets of Pompeii at least two houses are designated by the male members in stone, projecting from their fronts as evidence of their being houses of prostitution. But I have digressed. As Italy is left behind and we proceed north, more regard for the proprieties is observed. In Paris, public urinals (for men only) are plentiful. They consist of octagonal enclosures on the outer edge of the sidewalks, having the sides facing the streets, open. The enclosure does not reach the ground, so that the feet of the occupants are visible to the passers by. In addition to these, there are found along the Seine, and at some other points, private establishments, where the public (women included, I believe) can be accommodated for a few centimes. Similar urinals to the octagonal enclosures of Paris, may be found in some secluded places in London, but by far the most elaborate and commendable are those found under ground. The point of intersection of six or eight streets in this great city, is frequently called a circus, as Piccadilly circus and Oxford circus. In the centre of this considerable area of street, may be generally found a small square, a monument, or an area protected by iron posts. Beneath these areas, in several parts of the city, are to be found the lavatories named. I will briefly describe one in Trafalgar Square, which has been opened during my stay here. Upon an iron railing guarding a flight of stone steps, leading under the sidewalk of this area, I noticed the sign "Gentlemen," and descending found myself in a room well lighted—through thick glass in the sidewalk—and as well appointed, as a similar affair in the Palace Hotel, San Francisco. There were about thirty urinals, free to all comers, and a dozen closets and several wash basins, for use of which a penny is paid to the attendant. Adjoining this lavatory, but having no connection with it, and with separate entrance from the street, is a similar one for the use of ladies. I commend both of these institutions to the citizens of San Francisco.

This wonderful city of London is no exception to the rule that physicians are prone to herd together. In the early days of San Francisco I remember that fourteen of them lived in one block of Washington street, between Dupont and Stockton. Now, Union Square seems to be a favorite resort. In Melbourne, I am told they have almost monopolized several blocks of Collins street, and in London the same statement can be made of Harley and Wimpole, and some of the adjoining cross streets. Walking in this locality the other day, I was exceedingly interested in noting upon the door-plates the names of well known men of present and former times. I cannot forbear transcribing a few of these that come to mind: Luke, Churchill, Sir Henry Thompson, Sir Joseph Fayrer, Galabin, Abercrombie, Lankester, Donkin, Sansom, Sir Andrew Clark, Sir Richard Quain, Althaus, Brodie, Harley, Morel Mackenzie, Nettleship, Hughes Bennett, Arnott, Fox, Forbes Winslow, Hunter, Sir J. Paget, Barwell, West, Sir Spencer Wells, Lionel Beale, J. Braxton Hicks, W. S. Playfair, etc. Some of these names are represented by the sons of those who made them famous. I have not mentioned many others of whom we have not heard so much as yet, but who are making their mark.

The hospitals of London, as might be expected, are very numerous and well appointed, and they are all supported by endowment and by voluntary contributions. The London Hospital, Guy's and St. Thomas', having from 500 to 800 beds each, are the largest, but the total hospital accommodation numbers about 7,000 beds, of which 2,615 are in hospitals devoted to special branches. This does not include the city or parish infirmaries, which probably contain 3,000 more beds. All these hospitals have out-door departments or dispensaries. Thus the aggregate number of patients attended is enormous, but it is not to be considered an unmixed good, as a prominent physician admitted to me. A word about the location of these hospitals: Some are situated in the poorer quarters of the city, in East London, as in Shadwell and in Whitechapel, which has acquired so unenviable a notoriety of late; but others are found in the better portions of the city, and seem not to have excited the apprehension and dread experienced in our part of the world. King's College, Middlesex, St. Bartholomew's and Charing Cross Hospitals are located in the heart of London, the latter in close proximity to several of the largest and finest hotels; and St. George's Hospital is in the most fashionable portion, at Hyde Park corner, opposite the residences of the Duke of Wellington, the Rothschilds, etc. Some one suggested to me that the excessive objection to the construction of hospitals in San Francisco evidenced its provincial character.

I have derived much pleasure and profit from frequent visits to many of these hospitals, where I have witnessed numerous operations by several of the prominent men. Of these operations probably the most interesting was an abdominal section for extrauterine pregnancy, to which Dr. J. Braxton Hicks, so well known in obstetric literature, took me. The patient probably had tubal pregnancy which ruptured the tube in the third month, but did not rupture the membranes. The fetus continued to grow, and gave no further inconvenience to the mother; but, fearing that the sac might rupture, the operation was undertaken by Mr. Handfield Jones, at the beginning of the eighth month. An abdominal incision quickly exposed the semi-transparent sac, which was divided and a living child at once removed. The edges of the sac were now stitched to the edges of the abdominal incision, which was not closed, but covered with aseptic gauze and dressings. The utmost care was taken not to disturb the placental attachment. Ten days from the operation both mother and child were doing well. An operation for the removal of a ruptured extrauterine sac, in the third month, was performed at the Samaritan Free Hospital by Dr. Bantock with good result.

It would be useless for me to attempt to describe the several fine physiological and pathological museums of St. Bartholomew's, Kings' College, College of Surgeon's, Guy's, etc. I may, however, mention having seen in the latter the specimens of kidneys and supra renal capsules first exhibited by Drs. Bright and Addison, and described by them as showing the pathological lesions of diseases now known by their names. In this same museum are many truly wonderful reproductions of dissections in wax. The exactitude of reproduction of the anatomical arrangement of arteries, vessels, nerves, muscles and other tissues, and of the coloring, can only be described by the word already used, "wonderful." It needs but the smell of the dissecting-room to make the deception complete.

The many hospitals for children are a feature of London, and the contentment and patience of the little ones are at times almost pathetic. I was in many wards of many hospitals, and at many out-patients' clinics, and I scarcely ever heard a cry. The children were almost uniformly docile and tractable in examination. The prevalent diseases among them are syphilis, tuberculosis, rickets, pneumonia and bronchitis, pleurisy and empyema and rheumatic cardiac affections. A moderate degree of rickets is very frequent, but I can scarcely credit the extreme statement made by a teacher in New York, that all children brought up artificially have rickets. I am assured by Dr. J. Braxton Hicks that rickety-pelves are far less frequent than they were thirty or forty years ago; that there are many fewer cases now than formerly, requiring a resort to craniotomy and Cæsarean section, and this is as one might expect from the vastly improved hygienic and sanitary condition of London and its people, of their better supply of good food and water, of fresh air and—not sunlight! I have twice had opportunity of being present at meetings of the Obstetrical Society of London during discussions upon the comparative merits of craniotomy and Cæsarean section, and was pleased to note the growing tendency to favor the latter operation. I hesitate to mention names in connection with remarks made, as I may not fully present the speakers' views. Papers by Dr. Donald and Dr. Lemers had recently been read, recording 24 cases of craniotomy with no deaths, and another by Mr. Murdock Cameron, recording 18 cases of Cæsarean section with 2 deaths. It had also been reported that Leopold's latest figures were 50 Cæsarean sections with 4 deaths, a mortality of but 8 per cent. These seemed to be the basis of the discussion. Cæsarean section, as an operation of election, was strongly advocated by some speakers, who claimed that the mortality to the mother was about the same in both operations but it was very properly urged that such statements were based upon a comparison of the *old* craniotomy with the *new* Cæsarean section; and that if the former operation were performed early, and with the same antiseptic precautions and skill as the latter is by such operators as Leopold, the mortality would be almost nothing. There were, indeed, no statistics by which these two operations, under the new state of things, can be compared, unless it be those of Leopold himself, who reports 71 craniotomies, with no deaths. Some of the objections urged with great force against craniotomy were, that many of the mothers were seriously ill after its performance, that it often left them crippled as a result of severe pelvic inflammation, that there was no guarantee that pregnancy would not again recur and the operation require repetition, whereas in Cæsarean section the Fallopian tubes could be ligatured and divided, thus rendering the patient sterile, and finally, and more important than all, it necessitated the sacrifice of the child's life. Again, it was urged that the mortality from Cæsarean section is a diminishing quantity, that it is an operation of comparatively easy performance, that it offers, with almost a certainty, a living child.

The most difficult of all points seemed to be the ethical question, which was not, however, fully discussed. It is comparatively easy to decide when the child is dead, but some expressed themselves as more and more loth to perforate a living child's head. Is there any lessening of moral responsibility by permitting ineffectual labor until the child is thus destroyed? Some of the speakers said it was useless to base calculations on an ideal condition of things; existing conditions must be accepted. Cæsarean section in the country was almost uniformly fatal; craniotomy would continue to be performed; it had become necessary to revise the teaching upon these questions; the statistics of Leopold would not answer for London; in putting the case to a mother for her decision it would not be proper to assert that the mortality was but 8 per cent., for it is decidedly greater than that in London. It would be proper only to compare Leopold's statistics of Cæsarean section with his statistics of craniotomy. I gathered from the discussion that there would be a fair agreement upon the following points: Cæsarean section should be performed when the contracted diameter of the brim is 1½ to 2 inches or less; also, if the child be living and the diameter be greater, yet not sufficient to permit a living child to escape, provided the consent of the mother be obtained. If a mother is willing to take a little more risk for the sake of a living child, we are justified in operating. But if the mother refuses the operation, the physician is not justified in abandoning her; he must perform craniotomy. The pertinent question was asked by some members: "What if a woman relieved by craniotomy in a first pregnancy, presents herself a second time?" The inference being that its repetition would not be justifiable, but that the woman should submit to Cæsarean section.

I cannot close this letter without some reference to the fine medical society buildings in both London and New York. The Academy of Medicine, recently completed in the latter city, is architecturally and commodiously something to be proud of, and it affords a splendid home for the many medical societies of the metropolis. The building contains a fine medical library, and its reading room is supplied with the medical journals of the world. The same statements may be made regarding the fine accommodations of the Medico-Chirurgical Society in Hanover Square, London, except that the building was not recently erected, and the library is a more extensive one. I was here shown, by the kind and obliging Secretary, Mr. MacAlister, the vectis, braid fillets, and three pairs of forceps of the Chamberlens, which were discovered in a chest in their old house during the present century. HENRY GIBBONS, JR.

LONDON, May 7, 1892.

CORRESPONDENCE.

The Forney Case.

Sir: In complying with your request for a statement regarding the "Forney case" I break my rule of answering falsehood and calumny with silence. This, however, is a case of so infamous a character that my silence might be construed as an evidence of weakness. The prime mover in this affair is J. H. Leiening, of Colusa, who holds the office of Justice of the Peace. May 30, 1891, I received a letter, which I give *verbatim et literatim:*

"Colusa Cal. May 30th, 1891 Dr C. H. Gibbons, Dear Sir, a body was buried here the 14th of May last and strong suspition rests that poison was the cause of the death and a Pustmurtum should be heald to ascertain the facts. you had better com up Sunday tomorrow and atend to it. unles you apoint sum one here to act as Deputy Coroner. please attend to it as indicated if you ar not hear or hear from you the matter then will be attended to by sum Justice here. please cum up. Yours troly John H. Leiening J. P."

I went to Colusa, and Leiening stated to me that Christine Forney was in the family way, and the preacher, Dorsey, had had her poisoned to cover up the crime. I consulted several people in Colusa and found that no one suspected anything wrong until Leiening began talking about it. The girl had been subject to catalepsy for years. The day before her death she had been eating very freely of green apples. She was seized with cramps, which might have been the result of either cholera morbus or arsenical poisoning. After a few hours she became unconscious and lay in a trance several days, the body remaining warm and rigor mortis being absent. The fourth day all signs of life had disappeared. Before burial the story of poison was circulated and the attending physician, Dr. Cason, asked the parents if they suspected any foul play. They replied they did not. I empaneled a jury, had the body exhumed, and in the presence of the jury removed the stomach and duodenum. I then stated the suspicion of pregnancy, described to the jury the appearance the uterus would present if pregnancy were present or absent. I then removed the uterus from the body, cut it open before the jury and found it empty and of the natural size and appearance of a virgin womb. It was replaced, the body closed, and the inquest adjourned for eight days.

My first intention was to employ Price, the chemist, to make the analysis. I consulted Dr. W. H. Belton, two members of our Board of Supervisors and the acting District Attorney, and was advised to make the analysis myself. I took the stomach and went to San Francisco. At John Taylor's I told Mr. Crooks my business and asked his assistance in selecting the apparatus, saying I would not bring him into the case, so that he might not be put to any trouble as a witness. My chief suspicion was arsenic. The appearance of the body and the evidence of the attending physician made the list of suspected poisons very short. I tested the stomach and its contents and found no traces of arsenic or any other poison. On the day set for continuing the inquest I went to Colusa and told Leiening what I had done. He said: "I suppose if you tell the jury the analysis was made by a competent chemist it will answer the law." He then asked the privilege of conducting the examination that afternoon, saying he would do it for nothing, and added: "Everybody knows what an old bull-dog I am, and when I tell them it is all right they will be satisfied." I consented. He then asked to have a shorthand reporter present. I said I would call in the Court Reporter and Leiening asked me to give that job to a young friend of his, who he assured me was just as competent as Mr. Mulligan (the Court Reporter). I agreed to this also, and very foolishly, as it turned out, allowed Leiening to have it all his own way. In my evidence to the jury, to show that the stomach had not been out of my possession, I stated that I had taken it with me to San Francisco, that the analysis was made by a competent chemist. One of the jury asked who made the analysis. I replied that the responsibility rested entirely with me, but I received assistance from a man in San Francisco. The juryman asked if I was competent to make the analysis. I answered, "I am." Everybody appeared satisfied, and I returned to College City. In a few days the reporter sent me a typewritten copy of the report of the inquest. I read it carefully and found it correct. Soon after I received a letter from Leiening asking me to send the report back to him, as he wished to examine it again. I sent it to him and never saw it again until it was shown me in the Grand Jury room, about six months after. I found part of my testimony recorded as follows and certified to by the reporter, Mr. Edward St. Maurice:

Question: "What did you then do?"

Answer: "I took the stomach to San Francisco and had its contents analyzed by a chemist."

Question: "What is the name of the chemist?"

Answer: "I am under promise to him not to divulge his name. I paid him for the analysis of the body, with the understanding that he should not come up here unless he was paid for it, if anyone wishes he would be brought here. I am competent to make the examination myself."

Question: "What was the result of the examination?"

Answer: "I found nothing poisonous in the stomach"

On reading this I stated that the answers were falsely reported, except the last one, and pointed out the discrepancies between the first two answers and the last. Also, the ignorance of grammar which the writer of the second answer showed. I told how Leiening and his friend, the reporter, had obtained a chance to change the report after I had read it. The case was dropped by the Grand Jury. During intermission Leiening became possessed of the facts, and when the jury again convened a friend of his came in and made a demand for another analysis. He said he would pay for it himself, if necessary, but it must be done, for he *knew* there was arsenic in the body. Leiening also made a vehement demand for another analysis. By order of the Grand Jury the body was exhumed and found to have been tampered with since my examination. The heart and all the abdominal viscera were gone except a portion of the liver, which was analyzed and found to contain large quantities of arsenic. It was claimed that I had removed these organs to destroy the traces of poison.

Query: Does it look like the work of one who had any knowledge of toxicology? However, the Grand Jury indicted me for perjury.

I had enemies who would be greatly benefited by my ruin, and every possible influence was brought to bear against me. Leiening and his friend, the reporter, Edward St. Maurice, traveled over the county for the avowed purpose of obtaining evidence against my character. Leiening stated boldly that he was doing this in order to get even with the Christian Church, against which he fancied he had a cause for spite. He even declared that I was a member of the church. That assertion is described by the first three letters of his name. Some of my bitterest enemies, or rather friends of my enemies, were members of the Grand Jury, and, disregarding their oaths of secresy or respect for truth, attempted to injure my reputation by misrepresenting what I had said in the Grand Jury room. This aroused the indignation of fair-minded members of the Grand Jury, and I was furnished proof that Leiening and Maurice had, in their testimony, given different and conflicting statements regarding the reason they had sent for the report of the inquest, and these statements were disproved by the report itself.

When the trial began, the prosecution attempted to establish their case without introducing the report of the inquest, sworn to by Maurice. My lawyers insisted that this report should go before the jury, but the prosecution refused, knowing that the testimony above quoted would not only be fatal to the case, but would also convict Leiening and Maurice of conspiracy. Alarmed at being entangled in their own net, the prosecution rested their case after examining five witnesses out of over thirty which they had subpenaed. I made no defense; the case went to the jury, who were out just long enough to vote, and returned a verdict of "not guilty."

Such are the main facts in the case. I write this for the information of my professional brothers. It was a terrible ordeal, but I am proud to know that not a single friend turned against me when I was beset on every side and in every possible way. C. H. GIBBONS, M. D.

COLLEGE CITY, Cal., May 1, 1892.

OBITUARY.

DR. J. F. HAMILTON.

JOHN FARRAND HAMILTON, for many years a prominent physician of Salt Lake City, Utah, died April 9, 1892. He was born at Marbledale, Litchfield county, Connecticut, December 22, 1830, and graduated in medicine at Rush Medical College, Chicago, in 1854. His enthusiasm as a student, and his unusual aptitude for his chosen profession, secured for him the sympathy and friendship of Prof. Herrick in medicine, and that of Prof. Brainard in surgery, from each of whom he received much encouragement. Prior to graduation he was associated with Prof. Herrick at Mercy Hospital, and soon after, through the influence of Prof. Brainard, he was appointed Resident Surgeon at the United States Marine Hospital at Chicago. After two years of arduous postgraduate service at the latter institution, failing health forbade the young man to continue in a career which opened with promise of great usefulness. Accordingly he removed to Woodstock, Illinois, where he remained four years. Here, in 1856, he married Fidelia M. Belcher, who survives him. In 1860 health considerations brought him to Denver, Colorado, and a few months later, at the beginning of the war, he entered the Union army as Regimental Surgeon and Medical Director of the Department of the Plains, on the staff of General Patrick Edward Connor. At the close of the war he was ordered to Fort Douglas, Utah. Tiring of the monotonous inactivity of garrison life, he soon resigned his commission in the army to engage in the active practice of his profession on the frontier. He selected Salt Lake City as his home, and soon became the foremost surgeon of the inter-mountain empire. For more than a quarter of a century Dr. Hamilton was a conspicuous figure in private and professional life throughout the length and breadth of four territories. In the conduct of a laborious, wearisome practice, personal considerations were made subservient to the call of duty. To him no journey was long, no obstacle insurmountable. In the isolated hut of the ranchman, in the lonely cabin of the miner, as in the abode of wealth, the name of Dr. Hamilton was the synonym of all the qualities that endear man to his fellow man. He was untiring, self-sacrificing. His inspiration sprung from an unbounded faith in the means afforded by science for the relief of human suffering, and as an humble instrument of science the heaviest burden was borne without a murmur, oftentimes without reward. His life was an exemplification of the highest type of the loyal citizen, the brave soldier, the intrepid frontiersman, the bold and skillful surgeon, and more than all the modest, generous, genial gentleman. After two years of suffering, bravely borne, death brought him rest. Very appropriate was his burial from beneath the roof of St. Mark's Hospital, an institution founded by his energy and philanthrophy and fostered by his skill. T. W. H.

REVIEWS AND NOTICES.

DISEASES OF THE BLADDER AND PROSTATE. By Hal. C. Wyman, M. Sc., M. D., Professor of Surgery in the Michigan College of Medicine and Surgery, Detroit, etc. Physician's Leisure Library. Detroit: Geo. S. Davis. Price, paper, 25 cents; cloth, 50 cents.

This volume treats of a frequent and most perplexing class of infirmities, and in a thorough and conservative manner the author has performed a commendable task. In his remarks upon wounds of the bladder, the radical method of immediate operative interference is positively commended. It seems a little strange that an author of Dr. Wyman's experience should speak disparagingly of the so-called "Trendelenberg's position" for suprapubic lithotomy. It would seem from this very superficial and imperfect description of this position, that he could not have adopted it himself, or seen it correctly adopted by others. To place a patient in the true Trendelenberg position, requires a table so constructed that the thighs are elevated upon an inclined plane, the legs hanging over the edge thereof. It is not sufficient, as Prof. Wyman asserts, simply to elevate the pelvis upon a pad. No one who has faithfully proceeded upon this plan, will fail to appreciate its great value. The volume contains numerous hints and suggestions, many of them original, which renders it worthy of perusal.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Designed for the Use of Practitioners and Students of Medicine. By William Osler, M. D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore; formerly Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. New York: D. Appleton & Co.; pp. xviii, 1080. Cloth, $5.50; sheep, $6.50; half morocco, $7.00.

This work is divided into eleven sections. Section I deals with Specific Infectious Diseases; Section II, with Constitutional Diseases; Section III, Diseases of the Digestive System; Section IV, Diseases of the Respiratory System; Section V, Diseases of the Circulatory System; Section VI, Diseases of the Blood and Ductless Glands; Section VII, Diseases of the Kidneys; Section VIII, Diseases of the Nervous System; Section IX, Diseases of the Muscles; Section X, the Intoxications, Sunstroke, Obesity; Section XI, Diseases due to Animal Parasites. There are 19 charts and 5 figures. This work is, unquestionably, superior to similar works recently issued on this subject. It is written in a didactic style, and controversial matter is omitted. It is thoroughly modern, and embodies all the recent observations made in clinical medicine up to the time of issuance. The section on diseases of the nervous system is especially instructive and contains matter not found even in works specially devoted to that subject. The author's observations, which have been many and varied, are briefly cited throughout the book. While the use of the microscope in clinical diagnosis receives almost exhaustive consideration, little or no description of the methods employed are given. The illustrations are meagre and more useful than ornamental. No plates illustrating the electro-motor points are found in the otherwise excellent chapter on the nervous system. One would expect in a work of this kind to find a chapter devoted to diseases of the skin, but no special reference is made to such diseases. The treatment, in many affections, is brought out in detail, but in still other diseases it is altogether too brief to please the American physician. Notwithstanding these minor defects the book deserves careful perusal by every intelligent physician.

PULMONARY CONSUMPTION; A NERVOUS DISEASE; CONSIDERED AS SUCH FROM A PRACTICAL, A CLINICAL, AND A THERAPEUTIC STANDPOINT. By Thomas J. Mays, M.D., Professor of Diseases of the Chest in the Philadelphia Polyclinic and College for Graduates in Medicine; Visiting Physician to the Rush Hospital for Consumption, of Philadelphia, etc. Physician's Leisure Library. Detroit: George S. Davis.

The tenor of this work is to explain a neurotic origin of pulmonary consumption. The author has succeeded in collating a number of facts which he has woven into a theory that can be easily exploded. The book is interesting, because it shows how the varied facts in medicine may be perverted to accommodate an absurd theory.

STRICTURE OF THE RECTUM. By Chas. B. Kelsey, M. D., Professor of Diseases of the Rectum, at the New York Post-graduate School and Hospital.

A monograph by a specialist, so generally recognized as an authority, will rightly be accepted as the ultimatum of knowledge upon this subject. The paper deals chiefly with the various operations for relief of a most deplorable condition, viz.: excision of the rectum and colotomy. The *technique* of operative work is most fully set forth, and by reference to the author's tabulated report of operated cases, we learn that the surgeon is not wholly powerless in the presence of what was formerly considered a hopeless state of affairs.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held May 6, 1892, the following physicians having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State :

Lucine D. Campbell, Napa; Med. Dept. Univ. Vermont, July 19,'86.
Alson Dawson, San Francisco; Med. Dept. Univ. California, Nov. 3,'75.
George W. Dwinelle, Montague; Rush Med. Coll., Illinois, Feb.'85.
Charles H. S. Jones, San Francisco; Western Pennsylvania Med. Coll., Mar. 28,'89.
Arthur Marten, San Francisco; Baltimore Med. Coll., Maryland, Mar. 23,'92.
Philip Miller, San Francisco; Rush Med. Coll., Illinois. Mar. 29,'92.
S. M. Rohr, Baltimore, Md.; Baltimore Med. Coll., Maryland, Mar. 11,'89.
William Graham Ross, San Francisco; Royal Coll. Surgs. England, Jan. 26,'72.
James Edwin Scott, San Bernardino; Rush Med. Coll. Illinois, June 26,'77.
Samuel David Senor, St. Joseph, Mo.; Northwestern Med. Coll., St. Joseph, Mo., Feb. 26,'89.
Robert B. Smith, San Francisco; Beaumont Hosp. Med. Coll., St. Louis, Mo. Mar. 31,'92.
William T. F. Smith, Tehachapi; Rush Med. Coll., Illinois, Feb. 25,'79.
William Bradley Fowler, Wingham, Ontario, Canada; Univ. Victoria Coll., Ontario, Canada, May 5,'69.
Charles B. Tregloan, Dunsmuir; Keokuk Med. Coll., Iowa, Mar. 8,'92.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from April 21, 1892, to May 20, 1892.

William N. Suter, Assistant Surgeon, to be Assistant Surgeon with rank of Captain, May 16, 1892, after five years' service, in accordance with the Act of June 23, 1874.

Captain Robert R. Ball, Assistant Surgeon, is relieved from further duty at Fort Spokane, Wash., and will report in person to the commanding officer, Fort Townsend, Wash., for duty at that station.

Captain Louis W. Crampton, Assistant Surgeon, is relieved from duty at Fort Townsend, Wash., and will report in person to the commanding officer, Fort Spokane, Wash., for duty at that station.

Major David L. Huntington, Surgeon, is relieved from duty in New York City, to take effect on the final adjournment of the Army Medical Board, and will then proceed to Los Angeles, Cal., and report in person to the Commanding General Department of Arizona, relieving Colonel Joseph R. Smith, Surgeon. Colonel Smith, on being relieved by Major Huntington, will proceed to San Francisco, Cal., and report in person to Commanding General Department of California, for duty as Medical Director of that Department.

abode of wealth, the name of Dr. Hamilton was the synonym of all the qualities that endear man to his fellow man. He was untiring, self-sacrificing. His inspiration sprung from an unbounded faith in the means afforded by science for the relief of human suffering, and as an humble instrument of science the heaviest burden was borne without a murmur, oftentimes without reward. His life was an exemplification of the highest type of the loyal citizen, the brave soldier, the intrepid frontiersman, the bold and skillful surgeon, and more than all the modest, generous, genial gentleman. After two years of suffering, bravely borne, death brought him rest. Very appropriate was his burial from beneath the roof of St. Mark's Hospital, an institution founded by his energy and philanthrophy and fostered by his skill. T. W. H.

REVIEWS AND NOTICES.

DISEASES OF THE BLADDER AND PROSTATE. By Hal. C. Wyman, M. Sc., M. D., Professor of Surgery in the Michigan College of Medicine and Surgery, Detroit, etc. Physician's Leisure Library. Detroit: Geo. S. Davis. Price, paper, 25 cents; cloth, 50 cents.

This volume treats of a frequent and most perplexing class of infirmities, and in a thorough and conservative manner the author has performed a commendable task. In his remarks upon wounds of the bladder, the radical method of immediate operative interference is positively commended. It seems a little strange that an author of Dr. Wyman's experience should speak disparagingly of the so-called "Trendelenberg's position" for suprapubic lithotomy. It would seem from this very superficial and imperfect description of this position, that he could not have adopted it himself, or seen it correctly adopted by others. To place a patient in the true Trendelenberg position, requires a table so constructed that the thighs are elevated upon an inclined plane, the legs hanging over the edge thereof. It is not sufficient, as Prof. Wyman asserts, simply to elevate the pelvis upon a pad. No one who has faithfully proceeded upon this plan, will fail to appreciate its great value. The volume contains numerous hints and suggestions, many of them original, which renders it worthy of perusal.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Designed for the Use of Practitioners and Students of Medicine. By William Osler, M. D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore; formerly Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. New York: D. Appleton & Co.; pp. xviii, 1080. Cloth, $5.50; sheep, $6.50; half morocco, $7.00.

This work is divided into eleven sections. Section I deals with Specific Infectious Diseases; Section II, with Constitutional Diseases; Section III, Diseases of the Digestive System; Section IV, Diseases of the Respiratory System; Section V, Diseases of the Circulatory System; Section VI, Diseases of the Blood and Ductless Glands; Section VII, Diseases of the Kidneys; Section VIII, Diseases of the Nervous System; Section IX, Diseases of the Muscles; Section X, the Intoxications, Sunstroke, Obesity; Section XI, Diseases due to Animal Parasites. There are 19 charts and 5 figures. This work is, unquestionably, superior to similar works recently issued on this subject. It is written in a didactic style, and controversial matter is omitted. It is thoroughly modern, and embodies all the recent observations made in clinical medicine up to the time of issuance. The section on diseases of the nervous system is especially instructive and contains matter not found even in works specially devoted to that subject. The author's observations, which have been many and varied, are briefly cited throughout the book. While the use of the microscope in clinical diagnosis receives almost exhaustive consideration, little or no description of the methods employed are given. The illustrations are meagre and more useful than ornamental. No plates illustrating the electro-motor points are found in the otherwise excellent chapter on the nervous system. One would expect in a work of this kind to find a chapter devoted to diseases of the skin, but no special reference is made to such diseases. The treatment, in many affections, is brought out in detail, but in still other diseases it is altogether too brief to please the American physician. Notwithstanding these minor defects the book deserves careful perusal by every intelligent physician.

PULMONARY CONSUMPTION; A NERVOUS DISEASE; CONSIDERED AS SUCH FROM A PRACTICAL, A CLINICAL, AND A THERAPEUTIC STANDPOINT. By Thomas J. Mays, M.D., Professor of Diseases of the Chest in the Philadelphia Polyclinic and College for Graduates in Medicine; Visiting Physician to the Rush Hospital for Consumption, of Philadelphia, etc. Physician's Leisure Library. Detroit: George S. Davis.

The tenor of this work is to explain a neurotic origin of pulmonary consumption. The author has succeeded in collating a number of facts which he has woven into a theory that can be easily exploded. The book is interesting, because it shows how the varied facts in medicine may be perverted to accommodate an absurd theory.

STRICTURE OF THE RECTUM. By Chas. B. Kelsey, M. D., Professor of Diseases of the Rectum, at the New York Post-graduate School and Hospital.

A monograph by a specialist, so generally recognized as an authority, will rightly be accepted as the ultimatum of knowledge upon this subject. The paper deals chiefly with the various operations for relief of a most deplorable condition, viz.: excision of the rectum and colotomy. The *technique* of operative work is most fully set forth, and by reference to the author's tabulated report of operated cases, we learn that the surgeon is not wholly powerless in the presence of what was formerly considered a hopeless state of affairs.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held May 6, 1892, the following physicians having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State :

Lucine D. Campbell, Napa; Med. Dept. Univ. Vermont, July 19,'86.
Alson Dawson, San Francisco; Med. Dept. Univ. California, Nov. 3,'75.
George W. Dwinelle, Montague; Rush Med. Coll., Illinois, Feb.'85.
Charles H. S. Jones, San Francisco; Western Pennsylvania Med. Coll., Mar. 28,'89.
Arthur Marten, San Francisco; Baltimore Med. Coll., Maryland, Mar. 23,'92.
Philip Miller, San Francisco; Rush Med. Coll., Illinois. Mar. 29,'92.
S. M. Rohr, Baltimore, Md.; Baltimore Med. Coll., Maryland, Mar. 11,'89.
William Graham Ross, San Francisco; Royal Coll. Surgs. England, Jan. 26,'72.
James Edwin Scott, San Bernardino; Rush Med. Coll. Illinois, June 26,'77.
Samuel David Senor, St. Joseph, Mo.; Northwestern Med. Coll., St. Joseph, Mo., Feb. 26,'89.
Robert B. Smith, San Francisco; Beaumont Hosp. Med. Coll., St. Louis, Mo. Mar. 31,'92.
William T. F. Smith, Tehachapi; Rush Med. Coll., Illinois, Feb. 25,'79.
William Bradley Fowler, Wingham, Ontario, Canada; Univ. Victoria Coll., Ontario, Canada, May 5,'69.
Charles B. Tregloan, Dunsmuir; Keokuk Med. Coll., Iowa, Mar. 8,'92.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from April 21, 1892, to May 20, 1892.

William N. Suter, Assistant Surgeon, to be Assistant Surgeon with rank of Captain, May 16, 1892, after five years' service, in accordance with the Act of June 23, 1874.

Captain Robert R. Ball, Assistant Surgeon, is relieved from further duty at Fort Spokane, Wash., and will report in person to the commanding officer, Fort Townsend, Wash., for duty at that station.

Captain Louis W. Crampton, Assistant Surgeon, is relieved from duty at Fort Townsend, Wash., and will report in person to the commanding officer, Fort Spokane, Wash., for duty at that station.

Major David L. Huntington, Surgeon, is relieved from duty in New York City, to take effect on the final adjournment of the Army Medical Board, and will then proceed to Los Angeles, Cal., and report in person to the Commanding General Department of Arizona, relieving Colonel Joseph R. Smith, Surgeon. Colonel Smith, on being relieved by Major Huntington, will proceed to San Francisco, Cal., and report in person to Commanding General Department of California, for duty as Medical Director of that Department.

First Lieutenant Ogden Rafferty, on being relieved from duty at Camp Eagle Pass, Texas, will report in person to the commanding officer, Alcatraz Island, Cal., for duty at that post.

Lieutenant-Colonel Francis L. Town, Surgeon, in charge of office of the Medical Director at these headquarters, will proceed to Fort Gaston, Cal., and inspect the medical property there with a view to condemnation and disposition of such as is unserviceable. Upon completion of this duty he will return to his station in this city. Par. 1, S. O. 46, Dept. of California, April 29, 1892.

Captain William R. Hall, Assistant Surgeon, will report to the commanding officer, Troop I, 4th Cavalry, for duty with the guard at the Yosemite National Park. Par. 2, S. O. 46, Dept. of California, April 29, 1892.

The concluding part of Par. 5, S. O. 27, from these headquarters, is modified to read as follows: Lieutenant Colonel Francis L. Town, Surgeon, while on duty at these headquarters in charge of the office of the Medical Director, will examine recruits at the rendezvous in this city. Par. 3, S. O. 55, Dept. of California, May 20, 1890.

The journeys performed by Captain L. W. Crampton, Assistant Surgeon, from Fort Townsend to Seattle, Wash., and return, on April 20, May 5 and 12, 1892, on public business in connection with the examination of recruits in obedience to instructions from these headquarters, dated April 5; 1892, are confirmed. Par. 1, S. O. 68, Dept. of the Columbia, May 19, 1892.

First Lieutenant Charles Willcox, Assistant Surgeon, will accompany Company F, 1st Infantry, to its new station and there await further orders. Par. 2, S. O. 50, Dept. of California, May 9, 1892.

Colonel J. R. Smith, Surgeon, Medical Director of the Department, will proceed to Whipple Barracks and Fort Apache, A. T., Forts Wingate, Marcy, Stanton and Bayard, N. M., Forts Bowie, Grant and San Carlos and Fort Huachuca, A. T., for the purpose of examining unserviceable medical and hospital property thereat, with a view to the disposition of the same, and upon completion return to his proper station. Par. 1, S. O. 57, Dept. of Arizona, May 6, 1892.

In accordance with the provisions of Par. 1662, Army Regulations, as amended by G. O., No. 38, series 1890, headquarters of the army, Lieutenant Colonel Charles C. Byrne, Surgeon, Medical Director, will proceed to, and inspect the medical department, at the following named posts. Boisé Barracks, Idaho; Fort Walla Walla, Wash.; Fort Sherman, Idaho; and Fort Spokane, Wash. Upon completion of this duty Lieutenant Colonel Byrne will return to these headquarters. Par. 3, S. O. 56, Dept. of the Columbia, April 26, 1892.

Upon recommendation of the Medical Director of the Department, 1st Lieutenant Paul Shillock, Assistant Surgeon, will accompany the battalion of the 11th Infantry from Fort Grant to San Carlos, A. T., and from thence the 24th Infantry battalion to Fort Huachuca, A. T., in the exchange of station contemplated in Par. 1, S. O., No. 46, C. S. from this office. Upon completion of the duties assigned herein, Assistant Surgeon Shillock will rejoin his proper station. Par. 1, S. O. 60, Dept. of Arizona, May 12, 1892.

The telegraphic instructions from these headquarters of this date directing Assistant Surgeon William W. Gray to proceed without delay to Fort Spokane, Wash., for temporary duty, are confirmed. Par. 4, S. O. 64, Dept. of the Columbia, May 9, 1892.

Par. 1, S. O., No. 47, current series, from these headquarters is modified to read as follows: Captain Harry O. Perley, Assistant Surgeon, in addition to his duties as Post Surgeon of Fort Mason, will examine recruits at the recruiting rendezvous in this city and attend to the routine business of the Medical Director's office at these headquarters during the temporary absence of Lieutenant Colonel Francis L. Town, Surgeon, on other duties at Fort Gaston, Cal. Par. 1, S. O. 53, Dept. of California, May 16, 1892.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service (District of the Pacific) for the six weeks ending May 7, 1892.

Preston H. Bailhache, Surgeon, detailed as chairman of boards for physical examination of candidates for promotion and for appointment, Revenue Marine Service. Granted leave of absence for seven days.

D. A. Carmichael, Passed Assistant Surgeon, when relieved at Port Townsend, Wash., to proceed to National Quarantine Station, San Francisco, for duty.

G. M. Magruder, Passed Assistant Surgeon, when relieved at Portland, Oregon, to proceed to Port Townsend, Wash., for duty.

W. P. McIntosh, Passed Assistant Surgeon, when relieved at National Quarantine Station, San Francisco, to proceed to New Orleans for duty.

B. W. Brown, Assistant Surgeon, to proceed to Port Townsend, Wash., for temporary duty; to rejoin station when returned by Passed Assistant Surgeon Magruder.

C. H. Gardner, Assistant Surgeon, to proceed to San Francisco for temporary duty; to report to commanding officer Revenue Steamer "Rush" for duty.

G. B. Young, Assistant Surgeon, when relieved at St. Louis, Mo., to proceed to Portland, Oregon, for duty.

C. E. Decker, Assistant Surgeon, detailed as recorder of boards for physical examination of candidates for promotion and for appointment, Revenue Marine Service.